

51/281

WIPO



PCT/TCO/SS/III/12

ENGLISH ONLY

DATE: June 30, 1972

WORLD INTELLECTUAL PROPERTY ORGANIZATION
UNITED INTERNATIONAL BUREAUX FOR THE PROTECTION OF INTELLECTUAL PROPERTY
GENEVA

PATENT COOPERATION TREATY

INTERIM COMMITTEE FOR TECHNICAL COOPERATION

STANDING SUBCOMMITTEE

Third Session, Geneva, October 2 to 5, 1972

ISOLATED SEARCHES AND THE STUDY OF THE ESTABLISHMENT
OF UNIFORM SEARCH METHODS

Report by the International Bureau

I. ISOLATED SEARCHES

1. The Standing Subcommittee of the PCT Interim Committee for Technical Cooperation (hereinafter referred to as "the Standing Subcommittee") in its report adopted at the first session held in Geneva, December 8 to 11, 1971 "...noted with appreciation the offer of the Patent Office of Germany (Federal Republic) to make a report on its experience in performing 'isolated searches,' similar to the expected PCT searches, and invited the International Bureau to circulate that report to the prospective PCT Authorities" (paragraph 56 of document PCT/TCO/SS/I/17).
2. The Patent Office of Germany (Federal Republic) submitted such a report (see Annex I) to the International Bureau and copies of the report were transmitted to all prospective PCT Authorities under cover of Circular No. 1416.
3. The International Patent Institute (IIB) "...also agreed to make a report on its experience with 'isolated searches,' it being understood that the IIB report would also cover such searches made for the Netherlands Patent Office and would be established after the report of the German Patent Office was available" (paragraph 57 of document PCT/TCO/SS/I/17).
4. The report of the IIB will be distributed by the International Bureau to the prospective PCT Authorities as soon as it is submitted.

II. ESTABLISHMENT OF UNIFORM
SEARCH METHODS

5. The Standing Subcommittee invited the International Bureau "...to extract /from the information on the search methods of various examining Offices as already found in the framework of ICIREPAT/ such information as might be useful in connection with the exploration of the possibilities of establishing uniform search methods among PCT Authorities, and to present such information to the Standing Subcommittee" (paragraph 58 of document PCT/TCO/SS/I/17).

6. The information gathered by ICIREPAT consists of responses to two questionnaires circulated by the Secretariat to both the IIB and most of the national Offices of States now members of the Standing Subcommittee. The two questionnaires and a summary of the responses are found in document IC/TC.I/20(70) (see Annex II) prepared by the Secretariat. As the responses to the questionnaires were made in 1969 and early 1970, the answers given do not reflect current situations or practices in a number of Offices. Furthermore, the questionnaire was not directly concerned with either PCT minimum documentation or PCT search requirements.

7. The International Bureau feels that it might be desirable to have the prospective authorities review their responses in light of both their current practice and such PCT requirements. Such review may be facilitated by circulation of a new questionnaire which would both update the relevant parts of the previous studies as well as elicit additional search methods information which is specifically related to the PCT requirements.

8. The Standing Subcommittee is invited to advise the International Bureau as to the continuation of the study.

/Annexes I and II follow/

Progress Report by the German Patent Office
on the Setting up of "Isolated Searches"

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I. Search Principles

1. Regulation According to PCT

1.1. "Article 15 The International Search

(1) ---

(2) The objective of the international search is to discover relevant prior art.

(3) International search shall be made on the basis of the claims, with due regard to the description and the drawings (if any).

(4) ---

(5) ---"

1.2. "Rule 33 Relevant Prior Art for the International Search

33.1. Relevant Prior Art for the International Search

- (a) For the purposes of Article 15 (2), relevant prior art shall consist of everything which has been made available to the public anywhere in the world by means of written disclosure (including drawings and other illustrations) and which is capable of being of assistance in determining that the claimed invention is or is not new and that it does or does not involve an inventive step (i.e., that it is or is not obvious), provided that the making available

to the public occurred prior to the international filing date.

- (b) When any written disclosure refers to an oral disclosure, use, exhibition, or other means whereby the contents of the written disclosure were made available to the public, and such making available to the public occurred on a date prior to the international filing date, the international search report shall separately mention that fact and the date on which it occurred if the making available to the public of the written disclosure occurred on a date posterior to the international filing date.
- (c) Any published application or any patent whose publication date is later but whose filing date, or, where applicable, claimed priority date, is earlier than the international filing date of the international application searched, and which would constitute relevant prior art for the purposes of Article 15(2) had it been published prior to the international filing date, shall be specially mentioned in the international search report.

33.2. Fields to be Covered by the International Search

- (a) The international search shall cover all those technical fields, and shall be carried out on the basis of all those search files, which may contain material pertinent to the invention.

- (b) Consequently, not only shall the art in which the invention is classifiable be searched but also analogous arts regardless of where classified.
- (c) The question what arts are, in any given case, to be regarded as analogous shall be considered in the light of what appears to be the necessary essential function or use of the invention and not only the specific functions expressly indicated in the international application.
- (d) The international search shall embrace all subject matter that is generally recognized as equivalent to the subject matter of the claimed invention for all or certain of its features, even though, in its specifics, the invention as described in the international application is different.

33.3. Orientation of the International Search

- (a) International search shall be made on the basis of the claims, with due regard to the description and the drawings (if any) and with particular emphasis on the inventive concept towards which the claims are directed.
- (b) In so far as possible and reasonable, the international search shall cover the entire subject matter to which the claims are directed or to which they might reasonably be expected to be directed after they have been amended."

2. Regulation within the Procedure before the
German Patent Office

The search is directed towards the subject matter of the invention as characterized by the patent claims. Description and drawings of the patent application shall only be considered to the extent it is necessary for the comprehension of the patent claims. Features contained in the description or in the drawings which are not mentioned in the patent claims, do not have to be taken into account, even though they are characterized in the description as essential for the invention.

The search is carried out in respect to all patent claims. Although novelty, technological progress and inventive step have to be considered in the search, the search report does not give any evaluation thereof and the publications searched are not classified according to said criteria. In the event of several versions of the claims the search shall be based on the last filed version.

In the case of combination claims, their features have first of all to be searched together. The search has to include the individual features of the combination claims only if they are obviously of essential importance.

Prior to the search the examiner checks whether all classes, sub-classes, groups and sub-groups mentioned for his particular field have to be searched or whether certain classes, sub-classes, groups or sub-groups may be excluded, as they are not likely to contain any publications relating to the subject matter of the invention.

The search file thus to be considered shall be searched according to the groups and sub-groups of the patent

classifications system (patent and other literature); such search file also includes publications which are filed by reason of multiple classification in the respective classification units (Ergänzungsprüfstoff). The search has to be stopped only in the particular case publications are searched according to which the features of all patent claims are prejudicial as to novelty.

In respect to each patent claim - as far as it is not self-evident - all publications searched shall have to be mentioned within a reasonable extent. If the number of publications to be cited is getting too large by reason of an extremely extensive version of the main claim, only such publications shall be selected which by taking into consideration the restricting features of the dependent claims come nearest to the subject matter of the invention.

If publications forming part of a patent family are searched, such interrelation shall be marked by an equality sign (=) between the publications of the patent family combined in one group.

The search shall not be restricted to the state of the art according to Articles 1 and 2 German Patent Law^{*)}. On the contrary also prior rights within the meaning of Article 4, Section 2, of the German Patent Law^{*)} and earlier German patent applications shall be indicated to the extent they are available as publications [Offenlegungsschriften (unexamined applications), Auslegeschriften (examined applications) or Patentschriften (patents)] on the date of the search. Also publications published within the period of a priority claimed shall be mentioned. Brochures, company releases and the like shall only be considered if they obviously consti-

*) see Annex 1

tute a publication with a clearly specified publication date. In such case the publication date shall be indicated.

The search work will find its limits where it becomes obviously uneconomical in relation to the time spent and the scope of the technical field to be searched for the subject matter of the application.

3. Differences

3.1. There is an essential difference in that according to the German guidelines, a written disclosure made available to the public only after the filing date will not be mentioned, although the written disclosure refers to an oral disclosure, use or exhibition or other means and the date the oral disclosure was made available to the public is prior to the filing date.

3.2. There is no provision in the German guidelines corresponding to the last part of Rule 33.3 (b) PCT, according to which the search shall cover also amendments of the claims which may reasonably be expected.

II. The Search Report

1. The International Search Report

1.1. "Rule 43 The International Search Report

43.1. Identifications

The international search report shall identify the International Searching Authority which

established it by indicating the name of such Authority, and the international application by indicating the international application number, the name of the applicant, the name of the receiving Office, and the international filing date.

43.2. Dates

The international search report shall be dated and shall indicate the date on which the international search was actually completed. It shall also indicate the filing date of any earlier application whose priority is claimed.

43.3. Classification

- (a) The international search report shall contain the classification of the subject matter at least according to the International Patent Classification.
- (b) Such classification shall be effected by the International Searching Authority.

43.4. ---

43.5. Citations

- (a) The international search report shall contain the citations of the documents considered to be relevant.
- (b) The method of identifying any cited document shall be regulated by the Administrative Instructions.

- (c) Citations of particular relevance shall be specially indicated.
- (d) Citations which are not relevant to all the claims shall be cited in relation to the claim or claims to which they are relevant.
- (e) If only certain passages of the cited document are relevant or particularly relevant, they shall be identified, for example, by indicating the page, the column, or the lines, where the passage appears.

43.6. Fields Searched

- (a) The international search report shall list the classification identification of the fields searched. If that identification is effected on the basis of a classification other than the International Patent Classification, the International Searching Authority shall publish the classification used.
- (b) If the international search extended to patents, inventors' certificates, utility certificates, utility models, patents or certificates of addition, inventors' certificates of addition, utility certificates of addition, or published applications for any of those kinds of protection, of States, periods, or languages, not included in the minimum documentation as defined in Rule 34, the international search report shall, when practicable, identify the kinds of documents, the States, the periods, and the languages

in which it extended. For the purpose of this paragraph, Article 2 (ii) shall not apply.

43.7. ---

43.8. ---

43.9. No Other Matter

The international search report shall contain no matter other than that enumerated in Rules 33.1. (b) and (c), 43.1., 2., 3., 5., 6., 7. and 8., and 44.2. (a) and (b), and the indication referred to in Article 17 (2)(b). In particular, it shall contain no expressions of opinion, reasoning, arguments or explanations.

43.10. ---"

2. The Search Report of the German Patent Office

- 2.1. The preliminary examination division (patent division 01) first enters on form-sheet P 2250 (Annex 2; see also Annexes 5 and 7) the relevant classes, sub-classes, groups and sub-groups according to the German as well as the International Patent Classifications and the names of the examiners competent for said classes.

After termination of the search each examiner marks off and dates the column containing his name. He furthermore enters the classes and groups used for the search in the column "Recherchierte Klassen", indicates in the column provided therefore - separately according to classes and groups cited - the time

spent for the search including the checking of the application documents and ticks off in column "Berücksichtigt ist Prüfstoff aus" the countries, publications of which are regularly collected at the German Patent Office and the search file of which had been used. This applies also in case no publications of the respective country had been searched. Publications of third countries which happen to be in the search file will have to be mentioned in the search report whereas these countries are not referred to in said column. To the extent further foreign search files are regularly collected only as of a specified year, this fact will have to be mentioned, e.g. x Japan (JA) ab 1960. In this connection it is irrelevant whether said patent specifications are available in the original or in an abstract in the classified file of the examiner.

In form-sheet P 2252.0 (Annex 3; see also Annexes 5 and 7) the examiner lists the publications searched according to countries and within these countries - starting with the patent specifications - according to types of publications and rising numbers. If appropriate - in particular in case of a large number of publications searched - said list may also be consecutively numbered. In the case of several searchers participating in the search each of them will list the publications found in above sequence. The publications are then once again sorted in the fair copy by patent division 01.

In form-sheet P 2253.0 (Annex 4; see also Annexes 5 and 7) the examiner indicates the publications found in respect of all the patent claims in their consecutive order (e.g. "zu Anspruch 1", "zu Anspruch 2" etc.). If necessary for better understanding the

relevant citations from the publications shall be indicated with the number of page, section or line. If one publication covers several claims of the application said claims may be referred to jointly (e.g. "zu den Ansprüchen 3 bis 5").

If no publication has been found in respect to a particular patent claim this will have to be marked by a dash (e.g. "zu Anspruch 7: -").

Claims, the subject matter of which is mere common place or comes within the uncontested general knowledge, and have consequently not been searched will be marked by "0" (e.g. "zu Anspruch 8: 0").

In a final chapter there shall be cited other material forming part of the state of the art and connected with the problem of the invention which does not refer to individual patent claims. Such publications are to be marked by "allgemein zum Stand der Technik".

- 2.2. The method of mentioning bibliographical data of the publications searched is to be seen from Annex 9.
- 2.3. As a rule, classes and groups are neither to be stated for the patent specifications nor for other publications. Exceptions will be admissible if a publication is contained in the search file of the examiner, not, however, in the library of the German Patent Office, and which would be difficult to trace later on without an indication that it is to be found in the search file. Such indications about the filing of publications in the search file are not included in the fair copy of the search report. Applications, published as "Offenlegungsschriften" (unexamined applications), "Auslegeschriften" (examined applica-

tions) or "Patentschriften" (patents) after the filing date of the application to be searched but bearing an earlier filing date than the application to be searched shall be marked with the additional indication "Anmeldetag", e.g. DT-AS 1 201 001 Anmeldetag 18.09.65 (A.T. 18.09.65).

If such earlier German patents and patent applications are cited, explanatory remarks may only be given in respect to their claims, not, however, in respect to parts of the description or drawings. Moreover, they may only be cited in respect to the claims of the applications to be searched, not, however, in respect to the state of the art.

Publications issued during the priority period have to be marked by "veröff." (date of issue), e.g. US - PS 3 370 500 veröff. 27.02.68.

Patent families have to be mentioned in the following manner on both form sheets:

DT-AS 1 260 813 = DL-PS 59 451
= FR-PS 1 447 698.

In case a publication with a patent family pertaining thereto is cited in respect to several claims, indication of said patent family does not have to be repeated.

Terms such as "novelty", "technological progress", "inventive step" and the like which suggest an evaluation of the subject matter of the application as effected during the examination procedure, may not be used.

3. Differences

- 3.1. It is pointed out that publications of special importance are not particularly stressed in the German search report. It is held, that a special identification, for example underlining of the respective publications, is not necessary. However, it might be considered as a particular emphasis as against the material searched in respect to the state of the art, if publications are attributed to specified patent claims.
- 3.2. There are no other differences to be ascertained between the international and the German search reports, as the method of identifying any cited documents in the international search report shall only be regulated by the Administrative Instructions (Rule 43.5. b).

4. Comment on the Search Reports Annexed

- 4.1. Patent application 1 800 001 (Annexes 5 and 6).

This patent application has been classified in one main class and one sub-class (see Annex 5). Different examiners were competent for the main class and the sub-class. Each examiner has carried out his own search and has searched in addition to the classification unit indicated a further classification unit as is to be seen from column "Recherchierte Klassen". For the main class and sub-class searches the publications searched have been summed up in "Anlage 1" and the publications searched in respect to the claims of the patent application are specified in "Anlage 2". Each search has been signed by the competent examiner indicating the date of the completion of the search.

Annex 6 concerns an official notice to the applicant on the result of the publications searched. Hereby, too, the classification unit and the countries searched are indicated. The result of the main class and the sub-class searches, however, is summarized in "Anlage 1" and "Anlage 2" by the office staff setting up the search reports. The cover page contains the name of the examiner who carried out the search and the date of the completion of the search, in order to enable the applicant to know who participated in the search.

4.2. Patent Application 2 077 843 (Annexes 7 and 8)

This case, too, concerns a patent application which was classified in one main and one sub-class. The only difference in respect to the example given in 4.1. is, that the searches in the main and in the sub-class have been carried out by the examiner competent for the main class (see Annex 7). Accordingly the search was signed by only one examiner.

Annex 8 again refers to the notice sent to the applicant. In this case "Anlage 1" has been omitted and the publications have been mentioned on the cover as only a small number of publications had been cited. "Anlage 2" again contains the specified citations.

III. Experiences Made

1. Orientation of Examiners in Carrying out "Isolated Searches"

To a minor degree, examiners are entrusted with "isolated searches" who before had been working in the granting

procedure and had carried out examination searches within said procedure. In most cases, however, those examiners are taken who have set up so-called commercial searches before, i.e. searches outside the procedure before the patent office.

1.1. Reorientation of the Examiners from Examination Search to "Isolated Search".

There is an essential difference between these two types of searches. In case of an examination search the examiner normally questions the focal point of the invention (normally patent claim 1) whereas he does not bother much about the dependent patent claims, as said claims, once the patent claims on which they depend are abolished, will be dropped in the further course of the examination procedure, anyhow, or will at least have to be rephrased. Therefore, dealing with such dependent patent claims does not appear to be economical. In contrast thereto, in the "isolated search" which does not contain an evaluation of the patent claimed and no comment on the publications searched, the dependent claims have to be taken into account in the same way as the independent claims: only the exhaustive knowledge of the state of the art will enable the applicant to phrase the patent claimed in his application in such a manner as to satisfy the requirements of the German Patent Office as well as of any other patent office with which he might want to file his application.

The examiners familiar with the examination search are used to stop the search as soon as they have found material prejudicial to the focal point of the invention, then to set up the report and to wait for

the applicant's reaction. For the carrying out of "isolated searches" these examiners have to adopt a completely different attitude, as they are not allowed to send a report or even to comment on the citations. The main problem for these examiners was, to adapt themselves to a new type of search, that is to say, to search in respect to all claims "dependent or independent" and to go through the search file in all necessary classification units. The attribution in the search report of the documents searched to specific claims constitutes an advantage and a valuable self-control, as the examiners thereby are always reminded to carry out the search exhaustively.

The positive effect was that these examiners had the experience from the patent granting procedure. They were used to a concentrated search and to consider in selecting the documents searched, novelty as well as technological progress and inventive step.

1.2. Reorientation of the Examiners from the So-Called Commercial Search to the "Isolated Search"

There is also an essential difference between these two types of searches. In case of the so-called commercial search, the requests were not subject to any formal requirements. The subject matter of a request was merely described. Characterizing features in form of patent claims were only rarely phrased. The documents were mostly of a general contents and were not directed to one specific technical object.

The so-called commercial search did only deal with novelty without taking into consideration technological progress and inventive step. It was not possible to search for the purposes of the invention but only

for individual features. The interrelation between the individual features, too, could, as a rule, not be taken into account. In selecting the documents searched, an eventual evaluation of said documents in a subsequent examining procedure was not considered.

By reason of the phrasing of the documents, these examiners were not used to carry out a concentrated search. They were rather used to search in many classification units also from other fields, hoping to trace prior published material with prejudicial effect as to novelty. The search could take up to 20 hours.

For these examiners, in most cases, reorientation was more complicated and time-consuming. The examiners were introduced to the practice of the granting procedure during a 4-weeks training in the framework of which they attended special courses on patent law and the administrative course of the examining procedure. Particular emphasis was given to the carrying out of concentrated searches, and to the consideration and the effect of the search results in view of a subsequent examining procedure.

This sort of training proved very valuable and appropriate during the following activity for the "isolated search". For some of the examiners this reorientation to the new search system took quite some time, in spite of this special training.

1.3. Training of Junior Examiners

The appointment as examiner of the German Patent Office, i.e. as examiner for the examination of

patent applications as well as examiner for "isolated searches" is subject to a completed study of natural science or technical subjects at a university or a technical academy and work thereafter in a practical field for at least five years.

The practical training of the junior examiners to be charged with the "isolated searches" is principally directed towards this objective. In addition they are trained in the granting procedure by an examiner competent for the corresponding technical field.

During this training the junior examiners attend two courses on general law (24 hours each) and two courses on patent law (40 respectively 24 hours). Moreover, they are familiarized in special lectures with:

- (a) Special questions in the processing of patent applications relating to chemical fields,
- (b) Documentation and
- (c) Classification and the setting up of search files.

As a rule, the training takes 18 months. But usually these junior examiners are able to manage a normal workload already after one year.

1.4. Comparison of the Three Categories of Examiners

Examiners experienced in the granting procedure required the shortest retraining period, normally

only a few months. They are followed by the junior examiners, as these examiners were not handicapped by other search methods but could be trained exclusively in the "isolated searches" and in the granting procedure. Only the examiners who carried out the so-called commercial searches before met with the greatest difficulties. Although they were familiar with the search activity as such, they nevertheless always tended to search too broadly and consequently un-economically.

In any case we considered it necessary to have the "isolated search" always carried out not independently but in view of a granting procedure. Therefore we are of the opinion that the examiners carrying out "isolated searches" should also be familiar with the course of the granting procedure

2. Number of Citations

- 2.1. The introduction of the "isolated search" showed that the search was carried out on too broad a basis and sometimes publications were cited which had only a remote connection with the subject matter of the invention. Occasionally applicants complained that the technical contents of the documents cited were so remote that neither a delimitation of the patent claim nor a supplementation of the state of the art in the description was necessary.

Furthermore applicants pointed out that - besides the indication of patent families - very often several publications of more or less equivalent content were cited.

2.2. Accordingly, examiners were instructed as follows:

- (a) to cite publications in respect to the claims necessitating at least a delimitation of the patent claims,
- (b) to generally cite documents in respect to the state of the art to be considered either in regard to the problem of the invention or to the general inventive idea, at least, however, necessitating a supplementation of the state of the art in the description.

Furthermore they were instructed to make selections in case of several publications searched with more or less equivalent technical content and to cite only those publications with the broadest technical content in the search report.

In case of several publications with actually equivalent content, the search report is to cite said publications in the language used by the applicant, e.g. in case of a French applicant in the French language and in case of an American applicant in the English language.

2.3. According to a study carried out in 1971 the average rate of citations per search report was 6.3; this figure may be divided as follows:

- (a) German patent-literature 46,5 %
- (b) foreign patent-literature 47,6 %
- (c) German non-patent-literature 4,0 %
- (d) foreign non-patent-literature 1,9 %

A break-down according to technical fields will be as follows:

Technical Field	Number of citations	DT-patent-literature in %	Foreign patent-literature in %	DT-non-patent-literature in %	Foreign non-patent-literature in %
Mechanical engineering	6,6	43,9	52,4	2,9	0,8
Mechanical technology	4,5	48,1	47,1	4,5	0,3
Electrical engineering	9,0	47,3	46,8	4,0	1,9
Chemistry	1,6	33,1	53,1	5,0	8,8
Physical science	4,4	53,2	36,8	5,9	4,1

3. Search Times

- 3.1. Basis of calculation was the average search time for the so-called commercial searches amounting to 16.4 hours per search.
- 3.2. In summer 1968 the first trial searches according to the principles laid down in I.2. were carried out, requiring an average search time of 15.7 hours.

3.3. These search times seemed to be too high. Therefore examiners charged so far with so-called commercial searches, received a special training, as explained under III. 1.2.

In 1969 it was possible to reduce the search time to 11.5 hours.

3.4. Also these times appeared to be too high. Therefore the following measures were taken:

- (a) Speedier adaptation of the search file to the International Patent Classification whereby a more detailed sub-division was achieved. To the extent an official adaptation of the search file to the International Patent Classification was not yet possible, an internal detailed sub-division on the lines of the International Patent Classification was effected.
- (b) Multiple filing of the search file in main- and sub-classes.
- (c) In case of searches in the main- and in the sub-classes, the examiner competent for the main class - as far as possible - is also to carry out the search in the sub-classes.
- (d) Improvement of the assignment of tasks in such a manner that corresponding classes in which according to experience an additional search has to be effected in many cases, were assigned to the same examiner.

(e) A stricter control of the time limits in such a manner that each examiner had to file a weekly time-sheet with the head of his division.

It was the object of the measures taken under a) and b) to achieve a more specialized filing of the search file according to classification units and thus to reduce the volume of the file to be searched. By reason of the multiple filing it was no longer necessary to search in corresponding classes.

It was the object of the measures taken under c) and d) to concentrate the search as far as possible with one examiner and to avoid that several examiners have to work through the application documents.

The measure taken under e) was an enlargement of the controlling powers of the heads of the groups and divisions.

These measures proved successful. The average search time in 1971 could be reduced to 8.6 hours.

4. Lack of Unity of Invention

The German Patent Office does not attach great importance to the question of lack of unity of invention. Although patent applications are checked as to obvious lack of unity of invention prior to the "isolated searches", the rate of reclamations is very low, less than 1 %. We believe that the applicants do not try to misuse the principles of unity. This is confirmed by the experience made with the "isolated search".

From a total of 18 000 searches effected so far, only in two cases a search was not completed by reason of lack of unity of invention.

5. Number of Searches Effected

- 5.1. The law introducing the "isolated search" came into force as of October 1, 1968.

After an initial period of one year, the number of searches effected was statistically compiled as of September 1, 1969.

- 5.2. In the first statistical year the average rate of searches effected per examiner was 120 searches. The rates of the individual examiner ranged from 67 to 233.

- 5.3. In the second statistical year the average number of searches effected per examiner was 164 searches. The rates of the individual examiner ranged from 107 to 296.

6. Effects of Search Results

- 6.1. For 50 % of the cases a request for examination was filed subsequent to the search report. As under the German patent law requests for examination may be filed within a period of 7 years after filing of the application, a final judgment in respect to the remaining 50 % of the applicants is not yet possible.
- 6.2. In respect to the first 50 % for which a request for examination had been filed the application documents were restricted in two thirds of the cases by reason of the search request. For one third the request for examination was filed with unamended application documents. For some of these applications, the competent examiner requested at the beginning of the

examining procedure a restriction of the documents by reason of the search result. There is no statistical material on these cases.

IV. Final Observations

1. The foregoing report is based on more than three years experience in the setting up of "isolated searches".
2. Apart from the abstracts according to rules 8.38 and 44.2. PCT*) and minor differences as explained under I.2. and II.3., the "isolated search" may be considered as a search similar to the international search.
3. It was an advantage that the examiners entrusted with the setting up of "isolated searches" are also familiar with patents in general and with the relevant patent legislation in particular.
4. Experience has shown that if the searches are to be of the desired quality, a profound knowledge of the principles of patent law is absolutely necessary for the evaluation and the selection of the citations.
5. According to our experience a further reduction of the search time might bear the risk of a reduction of quality of the searches.
6. In view of a further intensification and improvement of the search activity, the examiners have been united in groups of 4 to 6 examiners under the direction of a senior examiner.
7. Particular emphasis is given to a further intensification of the training of the examiners who are in parti-

*) see Annex 10

ular to be made more familiar with the interrelation between the number of citations, search time, classification of search file, and quality of search.

8. For trial purposes "isolated searches" for alloys have been mechanized. For this purpose a Siemens-installation 4004/35 with a core storage of 64 K is used. If these trials prove successful, which seems to be quite possible in regard to the results obtained so far, it is intended to extend the "isolated search" as mechanized search also to other technical fields. By this type of search, the search time could be further reduced for the examiner. However, it has to be taken into account that additional work has to be carried out by auxiliary staff who submit the publications cited by the computer to the examiner for perusal.

[Annexes follow]

GERMANY (Federal Republic)

THE PATENT LAW

Part one

The Patent

Article 1

- (1) Patents are granted for new inventions which permit of industrial application (gewerbliche Verwertung).
- (2) The following shall be excluded:
1. inventions, the use of which would be contrary to law or morality, except where the laws merely restrict the offering for sale or putting on the market of the subject of the invention or, if the invention relates to a process, of the product obtained directly by means of that process;
 2. discoveries of plant varieties which, according to their species, figure in the List of Species annexed to the Law on the Protection of Plant Varieties, of May 20, 1968 (Bundesgesetzblatt I, p.429), and also processes used in breeding similar varieties.

Article 2

An invention is not considered new if at the time of the application for a patent (Article 26) it has already been described in printed publications made available to the public (öffent-

liche Druckschriften) during the preceding hundred years, or has already been publicly used in this country in such a manner that use thereafter by other persons skilled in the art (Sachverständige) seems possible. Any description or use within six months prior to the application shall not be taken into account if it is based upon the invention of the applicant or his predecessor in title.

Article 4

- (1) ---
- (2) However, if the invention is the subject of a patent granted on an earlier application, a later application cannot establish the right to the grant of the patent. If this condition applies only in part, the applicant shall have a right to the grant of the patent with a corresponding limitation.
- (3) ---

[Annex 2 follows]

Verfügung

1.1. Antrag gemäß § 28 a Abs. 1 PatG liegt vor und ist wirksam geprüft.

Patentblatt vom

2. Redakt. St. Patentblatt: Eingang des Rechercheantrags im Patentblatt veröffentlichen.

Ered. (Name, Datum)

3. Recherchen sind durchzuführen in/von *)

Klasse/Gr.
Klasse/Gr.
Klasse/Gr.
Klasse/Gr.
Klasse/Gr.
Klasse/Gr.
(Prüfernamen)

Table with columns: Zeitaufwand, Std. (Hours and minutes)

4. Akten den vorstehenden Prüfungs- bzw. Recherchestellen zur Durchführung der Recherche vorlegen.

1.1. Rechercheverarbeitung: Nach Erledigung von Ziff. 1.1.4.

Vordr. P 2251 mit Anlagen ausfertigen und mit Anschreiben (Vordr. P 2254) absenden an (+) Anm.-Vertr. und

Antragsl.-Vertr. (+) (bei Anmeldergemeinschaften insgesamt Ausfertigungen)

2. Weitere Veranlassung (Veröffentl. d. Rech.-Mittlg. usw.) siehe besondere Verfügung.

3. Z. d. Akten

Patentabteilung 01

Recherchen-Leitstelle

(Unterschrift)

Recherchierte Klassen:

Ermittelte Druckschriften: siehe Anlage 1

(Beim Recherchieren hier nichts eintragen!)

Berücksichtigt ist Prüfstoff aus:

- Deutschland (DT/DL) Österreich (OE) Schweiz (CH)
Großbritannien (GB) Frankreich (FR) USA (US)

Anlage 1

zur Recherche-Verfügung P 2250

für die dort genannten Prüfungs- und Recherchestellen zur Durchführung der Recherche

betr. Patentanmeldung P

Liste über die ermittelten Druckschriften:

Large empty table for listing found references.

[Annex 3 follows]

P 2252.0
10. 68

[Annex 4 follows]

Anlage 2

zur Recherche-Verfügung P 2250

für die dort genannten Prüfungs- und Recherchestellen zur Durchführung der Recherche

betr. Patentanmeldung P

Erläuterungen zu den ermittelten Druckschriften:

In den Erläuterungen bedeuten:

- „AT“: Anmeldetag einer älteren deutschen Patentanmeldung, die bereits als Druckschrift vorliegt.
- „Veröff.“: Ausgabetag einer Druckschrift im Prioritätsintervall.
- „“: Druckschriften, die auf dieselbe Ursprungsanmeldung zurückgehen („Patentfamilie“).
- „-“: Nicht ermittelt.
- „O“: Nicht recherchiert, da allgemein bekannter Stand der Technik.

P 2253.0.
2.70

[Annex 5 follows]

Verfügung

1.1. Antrag gemäß § 28a Abs. 1 PatG liegt vor und ist wirksam geprüft.

Patentblatt vom

2. Redakt. St. Patentblatt: Eingang des Rechercheantrags im Patentblatt veröffentlichen. Eried.

(Namensz., Datum)

3. Recherchen sind durchzuführen in/von*

Klasse/Gr.	Prüfung	Prüfer	Zeitaufwand:	Std.
21a4	15-00	Kewer	211	15
21a4	15-00	Dreßler	110	5
.....
.....
.....
.....

4. Akten den vorstehenden Prüfungs- bzw. Recherchestellen zur Durchführung der Recherche vorlegen.

II.1. Rechercheverarbeitend: Nach Erledigung von Ziff. I.1.4.

Vordr. P 2251 mit Anlagen ausfertigen und mit Anschreiben (Vordr. P 2254) absenden an +) Anm.-Vertr. und

Antragst.-Vertr. +) (bei Anmeldergemeinschaften insgesamt Ausfertigungen)

2. Weitere Veranlassung (Veröffentl. d. Rech.-Mittlg. usw.) siehe besondere Verfügung.

3. Z. d. Akten

Patentabteilung 01

Recherchen-Leitstelle

(Unterschrift)

1200001 A21b 21a4 15-31
 1200004 AT 02.01.68
 FR 10.01.67 Frankreich P 536 623

Bes.: Einrichtung zur Umwandlung eines Normalbettes in ein Doppelbett zur Verwendung in Hotelzimmern.

Anm.: Corbucier, gen. Durand, Angele, Paris 6, Frankreich;

Ver.: Lemprecht, K., Dipl.-Ing., Patentanwalt, 8000 München 2;

Bef.: Deutscher, Michel, 1000 Berlin 05

Recherchierte Klassen:

21a4 15-00
 21a4 15-31
 37a 7-00
 37c 22-00

Ermittelte Druckchriften: siehe Anlage 1

(Beim Recherchieren hier nichts eintragen!)

Berücksichtigt ist Prüfstoff aus:

- Deutschland (DT/DL) Österreich (OE) Schweiz (CH)
- Großbritannien (GB) Frankreich (FR) USA (US)
- Belgien (BL)
- Dänemark (DK)
-

*) Eintragung der Kl. u. Gr. durch Pat. Abt. 01 nach Wirksamkeitsprüfung des Rechercheantrags; weitere Eintragungen von den Stellen, die mit der Recherche befaßt sind.

Anlage 1

zur Recherche-Verfügung P 2250

für die dort genannten Prüfungs- und Recherchestellen zur Durchführung der Recherche

betr. Patentanmeldung P 12 00 001

Liste über die ermittelten Druckchriften:

DT-PS	201 598	
DT-AS	1 023 101	
DI-AS	1 260 807	Anmeldetag 14.09.62
DT-Anm L	30 126	VII/8b bek.gem.12.08.54
DT-OS	1 414 955	
DT-Gbm	1 236 805	
CE-PS	198 964	
CH-PS	356 643	
BE-PS	643 100	
FR-PS	822 222	
FR-Zusatz-PS	75 706	
DE-PS	841 767	veröff. 25.03.67
US-PS	2 463 921	
DT-Euch		R. Tomaschek, Grimschels Lehrbuch der Physik B.G.Teubner, 10.Aufl., Leipzig und Berlin (1942) 2. Bd. S. 581-582
DT-Zeitschrift		Archiv für Elektrotechnik Bd. 51 (1968) H. 5 S. 178-186
DT-Zeitschrift		Die Naturwissenschaften Bd. 55 (1968) H. 3 S. 150-154
DT-Firmenschrift		Hauptkatalog 1964, Photoelektrische Mess- und Schaltgeräte Dr. Bruno Lange GmbH, Berlin, S. 63
US-Zeitschrift		The Journal of the Acoustical Society of America Bd. 44 (1967) H. 4 S. 882-885

Anlage 1

zur Recherche-Verfügung P 2250
für die dort genannten Prüfungs- und Recherchestellen zur Durchführung der Recherche

betr. Patentanmeldung P 18 09 001

Erläuterungen zu den ermittelten Druckschriften:

Zu Anspruch 1:	DT-PS	201 508 S.7 u. Fig.1 Post.
	DI-32a	1 830 805
	OE-PS	198 964
	=CH-PS	356 643
zu Anspruch 2:	DT-OS	1 414 955 Anspr.2
	BE-PS	643 100 Anspr.4
	FR-Zusatz-PS	75 706 S.2 Sp.2 Z.56
zu Anspruch 3:	DT-Anm	L 30 126 VII/8b bek.gen. 10.09.54
	FR-PS	822 222 Anspr.5 u.Fig.10
zu Anspruch 4:	DT-AS	1 260 307 Anmeldetag 14.09.60
	GE-PS	841 767 veröff. 25.03.67
	DT-Buch	R.Tomaschek, Grimsehl Lehrbuch der Physik B.G.Teubner, 10.Aufl., Leipzig u.Berlin (1942) 2.Bd. S.581-582
	DT-Zeitschrift	Die Naturwissenschaften Bd.55 (1968) H.3 S.150-154 u. Fig.
zu den Ansprüchen 5 und 6:	-----	
zu Anspruch 7:	0	
zu Anspruch 8:	-----	
zu den Ansprüchen 9 bis 11:	DT-AS	1 023 101 S.6 Z.30-36
zu Anspruch 12:	US-PS	2 463 921 Fig.5 u.7

In den Erläuterungen bedeuten:

- „AT“: Anmeldetag einer älteren deutschen Patentanmeldung, die bereits als Druckschrift vorliegt.
- „Veröff.“: Ausgabetag einer Druckschrift im Prioritätsintervall.
- „=“: Druckschriften, die auf dieselbe Ursprungsanmeldung zurückgehen („Patentfamilien“).
- „-“: Nichts ermittelt.
- „0“: Nicht recherchiert, da allgemein bekannter Stand der Technik.

P 2253.A
2.70

Anlage 2

zur Recherche-Verfügung P 2250
für die dort genannten Prüfungs- und Recherchestellen zur Durchführung der Recherche

betr. Patentanmeldung P 18 09 001

Erläuterungen zu den ermittelten Druckschriften:

allgemein zum Stand der Technik:

- DT-Zeitschrift Archiv für Elektrotechnik
Ed.51 (1968) H.5 S.172-186
- DT-Firmenschrift Hauptkatalog 1964,
Photoelektrische Meß- und Schalt-
geräte,
Dr. Bruno Lange GmbH, Berlin, S.68
- US-Zeitschrift The Journal of the Acoustical
Society of America
Ed.44 (1967) H.4 S.822-835

Meyer 11.11.60

In den Erläuterungen bedeuten:

- „AT“: Anmeldetag einer älteren deutschen Patentanmeldung, die bereits als Druckschrift vorliegt.
- „Veröff.“: Ausgabetag einer Druckschrift im Prioritätsintervall.
- „=“: Druckschriften, die auf dieselbe Ursprungsanmeldung zurückgehen („Patentfamilien“).
- „-“: Nichts ermittelt.
- „0“: Nicht recherchiert, da allgemein bekannter Stand der Technik.

P 2253.A
2.70

Anlage 1

zur Recherche-Verfügung P 2250
für die dort genannten Prüfungs- und Recherchestellen zur Durchführung der Recherche

befr. Patentanmeldung P 18 00 001

Anlage 2

zur Recherche-Verfügung P 2250
für die dort genannten Prüfungs- und Recherchestellen zur Durchführung der Recherche

befr. Patentanmeldung P 18 00 001

Liste über die ermittelten Druckschriften:

DT-AS 1 253 470	veröff. 02.11.67	
=DL-PS 59 451	veröff. 20.12.67	
=FR-PS 1 447 698	veröff. 31.10.67	
FR-PS 12 345 M		
DT-Zeitschrift	Chemisches Zentralblatt Bd.134 (1963) S.360 (IT-PS 517 316)	
DT-Zeitschrift	Chemisches Zentralblatt Bd.139 (1968) H.8 Referat 1034	
GB-Zeitschrift	Derwent Japanese Patents Report Bd.4 (1965) H.3 (1) S.1 (JA-AS 818 (1965))	
US-Zeitschrift	Chemical Abstracts Bd.65 (1966) Sp.1610e	
US-Zeitschrift	Chemical Abstracts Bd.66 (1967) Referat 1069w	

Erläuterungen zu den ermittelten Druckschriften:

Zu Anspruch 1:	DT-AS 1 253 470 veröff. 02.11.67 Fig.3 u.Anspr.
	=DL-PS 59 451 veröff. 20.12.67
	=FR-PS 1 447 698 veröff. 31.10.67
zu Anspruch 2:	FR-PS 12 345 M Fig.6 Pos.k
zu Anspruch 3:	DT-AS 1 253 470 veröff. 02.11.67 Anspr.7
zu den Ansprüchen 4 bis 6:	-----
zu Anspruch 7:	0
zu Anspruch 8:	DT-Zeitschrift Chemisches Zentralblatt Bd.134 (1963) S.360 (IT-PS 517 316)
	DT-Zeitschrift Chemisches Zentralblatt Bd.139 (1968) H.8 Referat 1034 (J.med.Chem. 10 (1967) 2, 154-158)
	US-Zeitschrift Chemical Abstracts Bd.65 (1966) Sp.1610e (Am. Mineralogist 51 (1-2), 216-220 (1966))
zu Anspruch 9:	GB-Zeitschrift Derwent Japanese Patents Report Bd.4 (1965) H.3 (1) S.1 (JA-AS 818 (1965))
zu den Ansprüchen 10 bis 12:	-----
In den Erläuterungen bedeuten:	
„AT“:	Anmeldetag einer älteren deutschen Patentanmeldung, die bereits als Druckschrift vorliegt.
„Veröff.“:	Ausgabotag einer Druckschrift im Prioritätsintervall.
„=“:	Druckschriften, die auf dieselbe Ursprungsanmeldung zurückgehen („Patentfamilien“).
„-“:	Nichts ermittelt.
„0“:	Nicht recherchiert, da allgemein bekannter Stand der Technik.

Anlage 2

zur Recherche-Verfügung P.2250
für die dort genannten Prüfungs- und Recherchestellen zur Durchführung der Recherche

betr. Patentanmeldung P 18 00 001

Erläuterungen zu den ermittelten Druckschriften:

allgemein zum Stand der Technik:

US-Zeitschrift Chemical Abstracts
Bd.66 (1967) Referat 1062v
(J.Clin.Invest. 45 (11), 1719-31
(1966) (Eng.))

Dr. Schmidt 13.11.68

Mitteilung

Über das Ergebnis einer Druckschriftenermittlung gemäß § 28 a des Patentgesetzes
(Zutreffendes ist angekreuzt!)

Auf Grund des vom Anmelder - Antragsteller

gemäß § 28 a Abs. 1 des Patentgesetzes gestellten Antrags vom 10. Januar 1968
sind zur unten links bezeichneten Patentanmeldung die unten rechts aufgeführten auf der beigefügten Liste
(Anlage 1) angegebenen öffentlichen Druckschriften ermittelt worden.

Solfern zu den Ermittlungen nähere Einzelheiten anzugeben waren, gehen diese aus dem beigefügten Erläuterungsblatt
(Anlage 2) hervor.

1800001 A21b 21a4 15-31
1800001 AT 02.01.68
Pr 10.01.67 Frankreich P 536 623

Res.: Einrichtung zur Umwandlung eines
Normalbettes in ein Doppelbett zur Ver-
wendung in Hotelzimmern.

Ann.: Corbusier, geb. Durand, Angele,
Paris 6, Frankreich;

Vtr.: Lamprecht, K., Dipl.-Ing.,
Patentanwalt, 8000 München 2;

Erf.: Deutscher, Michel, 1000 Berlin 05

Ermittelt wurde in folgenden
Patentklassen:

21a4 15-00
21a4 15-31
37d 7-C8
37c 32-01

Ermittelte Druckschriften: siehe Anlage 1

In Betracht gezogen sind Prüfstoffe folg. Länder:*)

- Deutschland (DT/DL) Österreich (OE) Schweiz (CH)
- Großbritannien (GB) Frankreich (FR) USA (US)
- Belgien (BE)
- Dänemark (DK)
-

*) Die von den angekreuzten Ländern ausgegebenen Patentschriften u. dgl. sind, soweit sie im Deutschen Patentamt im wesentlichen vollständig vorhanden sind, bei der Druckschriftenermittlung durchgesehen worden. Eine Gewähr für Vollständigkeit der Ermittlung wird nicht geleistet (§ 28 a Abs. 7 PatG).

Klasse/Gruppe	21a4 15-00	gez. Meyer 11.11.68	Ausgefertigt:
Klasse/Gruppe	37d 7-C8	gez. Dr. Schmidt 13.11.68	
Klasse/Gruppe			
Klasse/Gruppe			
Klasse/Gruppe			



PCT/TCO/SS/III/12
Annex I
page 21

In den Erläuterungen bedeuten:

- „AT“: Anmeldetag einer älteren deutschen Patentanmeldung, die bereits als Druckschrift vorliegt.
- „Veröff.“: Ausgabetag einer Druckschrift im Prioritätsintervall.
- „=“: Druckschriften, die auf dieselbe Ursprungsanmeldung zurückgehen („Patentfamilien“).
- „-“: Nichts ermittelt.
- „0“: Nicht recherchiert, da allgemein bekannter Stand der Technik.

Anlage 1

zur Mitteilung über die ermittelten Druckschriften gemäß § 28a des Patentgesetzes

betr. Patentanmeldung P 18 00 001

Liste über die ermittelten Druckschriften

DT-PS	201 598	
DT-AS	1 023 101	
DT-AS	1 253 470	veröff. 02.11.67
=DL-PS	59 451	veröff. 20.12.67
=FR-PS	1 447 698	veröff. 31.10.67
DT-AC	1 260 807	Anmeldetag 14.09.62
DT-Arm	L 30 126 VII/8b	bek.gem.12.08.54
DT-OS	1 414 955	
DT-Gtm	1 236 805	
OE-PS	198 964	
=CH-PS	356 643	
EE-PS	643 100	
FR-PS	12 345 M	
FR-PS	822 222	
FR-Zusatz-PS	75 706	
GE-PS	241 767	veröff. 25.03.67
US-PS	2 453 921	
DT-Buch	R.Tomaschek, Grimsehl	Lehrbuch der Physik B.G.Teubner, 10.Aufl., Leipzig und Berlin (1942) 2. Bd. S. 581-582
DT-Zeitschrift	Archiv für Elektrotechnik	Bd. 51 (1968) H. 5 S. 178-186
DT-Zeitschrift	Die Naturwissenschaften	Ed. 55 (1968) H. 3 S. 150-154
DT-Zeitschrift	Chemisches Zentralblatt	Ed. 134 (1963) S. 360 (IT-PS 517 316)
DT-Zeitschrift	Chemisches Zentralblatt	Ed. 139 (1968) H. 8 Referat 1034
DT-Firmenschrift	Hauptkatalog 1964, Photoelektrische Meß- und Schaltgeräte Dr. Bruno Lange GmbH, Berlin, S. 60	
GE-Zeitschrift	Derwent Japanese Patents Report	Ed. 4 (1965) H. 3 (1) G. 1 (JA-AS 818 (1965))

Anlage 1

zur Mitteilung über die ermittelten Druckschriften gemäß § 28a des Patentgesetzes

betr. Patentanmeldung P 18 00 001

Liste über die ermittelten Druckschriften

US-Zeitschrift	The Journal of the Acoustical Society of America	Bd. 44 (1967) H. 4 S. 882-885
US-Zeitschrift	Chemical Abstracts	Bd. 65 (1966) Sp. 1610e
US-Zeitschrift	Chemical Abstracts	Bd. 66 (1967) Referat 1069w

Anlage 2

zur Mitteilung über die ermittelten Druckschriften gemäß § 28 a des Patentgesetzes

betr. Patentanmeldung P 12 00 001

Erläuterungen zu den ermittelten Druckschriften:

Zu Anspruch 1: DT-PS 201 598 S.7 u. Fig.1 Pos.m
DT-AS 1 253 470 veröff. 02.11.67 Fig.3 u. Anspr.
=DL-PS 59 451 veröff. 20.12.67
=FR-PS 1 447 698 veröff. 31.10.67
DT-Gbm 1 836 805
OE-PS 198 964
=CH-PS 356 643

zu Anspruch 2: DT-GS 1 414 955 Anspr.2
BE-PS 643 100 Anspr.4
FR-PS 12 345 M Fig.6 Pos.k
FR-Zusatz-PS 75 706 S.2 Sp.2 Z.56

zu Anspruch 3: DT-AS 1 253 470 veröff. 02.11.67 Anspr.7
DT-Anm L 30 126 VII/8b bek.gem. 12.09.54
FR-PS 822 222 Anspr.5 u. Fig.10

zu Anspruch 4: DT-AS 1 260 807 Anmeldetag 14.09.62
GB-PS 841 767 veröff. 25.03.67

DT-Buch R.Tomaschek, Grimsehl Lehrbuch der Physik
E.G.Teubner, 10.Aufl., Leipzig u. Berlin
(1942) 2.Bd. S. 581-582

DT-Zeitschrift Die Naturwissenschaften
Bd.55 (1968) H.3 S.150-154 u. 155

zu den Ansprüchen 5 und 6: _____

zu Anspruch 7: 0

In den Erläuterungen bedeuten:

„AT“: Anmeldetag einer älteren deutschen Patentanmeldung, die bereits als Druckschrift vorliegt.
„Veröff.“: Ausgabetag einer Druckschrift im Prioritätsintervall.
„-“: Druckschriften, die auf dieselbe Ursprungsanmeldung zurückgehen („Patentfamilien“).
„-“: Nichts ermittelt.
„O“: Nicht recherchiert, da allgemein bekannter Stand der Technik.

Anlage 2

zur Mitteilung über die ermittelten Druckschriften gemäß § 28 a des Patentgesetzes

betr. Patentanmeldung P 13 00 001

Erläuterungen zu den ermittelten Druckschriften:

zu Anspruch 8: DT-Zeitschrift Chemisches Zentralblatt
Bd.134 (1963) S.360
(IT-PS 517 316)

DT-Zeitschrift Chemisches Zentralblatt
Bd.139 (1968) H.8 Referat 1034
(J.med.Chem. 10 (1967) 2, 154-152)

US-Zeitschrift Chemical Abstracts
Ed.65 (1966) Sp.1610c
(Am. Mineralogist 51 (1-2), 216-20
(1966))

zu Anspruch 9: DT-AS 1 023 101 S.6 Z.30-36

GB-Zeitschrift Derwent Japanese Patents Report
Bd.4 (1965) H.3 (1) S.1
(JA-AS 818 (1965))

zu den Ansprüchen 10 und 11: DT-AS 1 023 101 S.6 Z.30-36

zu Anspruch 12: US-PS 2 463 921 Fig.5 u.7

allgemein zum Stand der Technik:

DT-Zeitschrift Archiv für Elektrotechnik
Bd.51 (1968) H.5. S.178-180

DT-Firmenschrift Hauptkatalog 1964,
Photoelektrische Meß- und Schalt-
geräte,
Dr. Bruno Lenge GmbH, Berlin, S.68

US-Zeitschrift The Journal of the Acoustical
Society of America
Bd.44 (1967) H.4 S.882-885

US-Zeitschrift Chemical Abstracts
Bd.66 (1967) Referat 1069w
(J.Clin.Invest. 45 (11), 1719-31
(1966) (Engl.))

In den Erläuterungen bedeuten:

„AT“: Anmeldetag einer älteren deutschen Patentanmeldung, die bereits als Druckschrift vorliegt.
„Veröff.“: Ausgabetag einer Druckschrift im Prioritätsintervall.
„-“: Druckschriften, die auf dieselbe Ursprungsanmeldung zurückgehen („Patentfamilien“).
„-“: Nichts ermittelt.
„O“: Nicht recherchiert, da allgemein bekannter Stand der Technik.

Verfügung

I.1. Antrag gemäß § 28a Abs. 1 PatG liegt vor und ist wirksam geprüft.

Patentblatt vom

2. Redakt. St. Patentblatt: Eingang des Recherchantrags im Patentblatt veröffentlichen. Ered. (Namensz., Datum)

3. Recherchen sind durchzuführen in/von*

Klasse/Gr.	Prüfer
47h 1-16
42k 7-05
.....
.....
.....
.....

Zeitaufwand:	Std.
51 1 2 1
1 2 1 7 1/2
.....
.....
.....
.....

4. Akten den vorstehenden Prüfungs- bzw. Recherchestellen zur Durchführung der Recherche vorlegen.

II.1. Rechercheverarbeitung: Nach Erledigung von Ziff. I.1.4.

Vordr. P 2251 mit Anlagen ausfertigen und mit Anschreiben (Vordr. P 2254) absenden an +) Anm.-Vertr. und

Antragst.-Vertr. +) (bei Anmeldergemeinschaften insgesamt Ausfertigungen)

2. Weitere Veranlassung (Veröffentl. d. Rech.-Mittlg. usw.) siehe besondere Verfügung.

3. Z. d. Akten

Patentabteilung 01

Recherchen-Leitstelle

(Unterschrift)

2077843 F16h1-16 47h 1-16

2077847 AT 34.05.70
Fr 22.06.69 Frankreich, 30791-69

Ben.: Dichtwandwandler

Anm.: Dubamel, Pierre, Lyon (Frankreich)

Vtr.: Markstein, Andreas, Dipl.-Ing.,
Patentanwalt, 8000 München 2;

Erf.: Petit, Daniel, Marseille (Frankreich)

Recherchierte Klassen:

47h 1-16, 35-10
42k 7-05

Ermittelte Druckschriften: siehe Anlage 1

(Beim Recherchieren hier nichts eintragen!)

Berücksichtigt ist Prüfstoff aus:

- Deutschland (DT/DL) Österreich (OE) Schweiz (CH)
- Großbritannien (GB) Frankreich (FR) USA (US)
- Belgien
- Dänemark
-

*) Eintragung der Kl. u. Gr. durch Pat. Abt. 01 nach Wirksamkeitsprüfung des Recherchantrags; weitere Eintragungen von den Stellen, die mit der Recherche beauftragt sind.

Anlage 1

zur Recherche-Verfügung P 2250

für die dort genannten Prüfungs- und Recherchestellen zur Durchführung der Recherche

befr. Patentanmeldung P 20 77 847

Liste über die ermittelten Druckschriften:

DT-PS	432	904
DT-PS	724	656
DT-PS	876	496
CH-PS	285	890
US-PS	2	562 278
US-PS	2	578 533
US-PS	3	339 426

Anlage 2

zur Recherche-Verfügung P 2250
für die dort genannten Prüfungs- und Recherchestellen zur Durchführung der Recherche

betr. Patentanmeldung P 20 77 243

Erläuterungen zu den ermittelten Druckschriften:

Zu Anspruch 1: DT-PS 432 904 Pos. s,u,t,d,h,g
 CH-PS 285 890 Pos. 2,5,18,19,20
 US-PS 2 562 278 Pos. 10,24,28,R,45
 US-PS 2 578 533 Pos. 30,40,44
 US-PS 3 339 426 Pos. 1,5,13

Zu Anspruch 2: DT-PS 432 904 Pos. f,d,p,h
 CH-PS 285 890 Pos. 21,18,19,20
 US-PS 2 562 278 Fig.5, Pos. S₁,S₂,27,30,31
 US-PS 3 339 426 Pos. 5,7,13

zu den Ansprüchen
 3 bis 5: -

Zu Anspruch 6: CH-PS 285 890 Pos. 20
 US-PS 2 562 278 Pos. 45
 US-PS 3 339 426 Pos. 13,j

allgemein zum Stand der Technik:

DT-PS 724 656
 DT-PS 876 496

Kühne 5.7.71

In den Erläuterungen bedeuten:

- „AT“: Anmeldetag einer älteren deutschen Patentanmeldung, die bereits als Druckschrift vorliegt.
- „Veröff.“: Ausgabetag einer Druckschrift im Prioritätsintervall.
- „-“: Druckschriften, die auf dieselbe Ursprungsanmeldung zurückgehen („Patentfamilien“).
- „-“: Nichts ermittelt.
- „O“: Nicht recherchiert, da allgemein bekannter Stand der Technik.

P 2253.0.
2.70

/ Annex 8 follows /

Mittellung

Über das Ergebnis einer Druckschriftenermittlung gemäß § 28 a des Patentgesetzes
(Zutreffendes ist angekreuzt)

Auf Grund des vom Anmelder - Antragsteller

gemäß § 28 a Abs. 1 des Patentgesetzes gestellten Antrags vom 29. Dezember 1970
sind zur unten links bezeichneten Patentanmeldung die unten rechts aufgeführten auf der beigefügten Liste
(Anlage 1) angegebenen öffentlichen Druckschriften ermittelt worden.

Sofern zu den Ermittlungen nähere Einzelheiten anzugeben waren, gehen diese aus dem beigefügten Erläuterungsblatt
(Anlage 2) hervor.

2077843 F16h1-16 47h 1-16
2077843 AT 31.05.70
Pr 02.06.69 Frankreich 30791-69
Bez.: Drehmomentwandler
Ann.: Duhamel, Pierre, Lyon (Frankreich)
Vtr.: Markstein, Andreas, Dipl.-Ing.,
Patentanwalt, 8000 München 21
Erf.: Petit, Daniel, Marseille (Frankreich)

Ermittelt wurde in folgenden
Patentklassen:
47h 1-16, 35-10
42k 7-05
Ermittelte Druckschriften: siehe Anlage 1

DT-PS 432 904
DT-PS 724 656
DT-PS 876 496
CH-PS 285 890
US-PS 2 562 278
US-PS 2 578 533
US-PS 3 339 426

In Betracht gezogen ist Prüfstoff folg. Länder:*)

- Deutschland (DT/DL) Österreich (OE) Schweiz (CH)
- Großbritannien (GB) Frankreich (FR) USA (US)
- Belgien (BE)
- Dänemark (DK)
-

*) Die von den angekreuzten Ländern ausgegebenen Patentschriften u. dgl. sind, soweit sie im Deutschen Patentamt im wesentlichen vollständig vorhanden sind,
bei der Druckschriftenermittlung durchgesehen worden. Eine Gewähr für Vollständigkeit der Ermittlung wird nicht geleistet (§ 28 a Abs. 7 PatG).

Klasse/Gruppe 47h, 42k gez. Kühne (Berlin)
Klasse/Gruppe 5, 3, 71
Klasse/Gruppe _____
Klasse/Gruppe _____
Klasse/Gruppe _____

Ausgefertigt:



Regierungsangestellte(r)

P 2251.0.
B. 70

Anlage 2

zur Mittellung über die ermittelten Druckschriften gemäß § 28 a des Patentgesetzes
betr. Patentanmeldung P 20 77 843

Erläuterungen zu den ermittelten Druckschriften:

Zu Anspruch 1: DT-PS 432 904 Pos. s,u,t,d,h,g
CH-PS 285 890 Pos. 2,5,18,19,20
US-PS 2 562 278 Pos. 10,24,28,E,45
US-PS 2 578 533 Pos. 30,40,44
US-PS 3 339 426 Pos. 1,5,13
zu Anspruch 2: DT-PS 432 904 Pos. f,d,p,h
CH-PS 285 890 Pos. 21,18,19,20
US-PS 2 562 278 Fig.5, Pos. S₁,S₂,27,36,3
US-PS 3 339 426 Pos. 5,7,13

zu den Ansprüchen
3 bis 5: -

zu Anspruch 6: CH-PS 285 890 Pos. 20
US-PS 2 562 278 Pos. 45
US-PS 3 339 426 Pos. 13,j

allgemein zum Stand der Technik:

DT-PS 724 656
DT-PS 876 496

In den Erläuterungen bedeuten:

- „AT“: Anmeldetag einer älteren deutschen Patentanmeldung, die bereits als Druckschrift vorliegt.
- „Veröff.“: Ausgabetag einer Druckschrift im Prioritätsintervall.
- „-“: Druckschriften, die auf dieselbe Ursprungsanmeldung zurückgehen („Patentfamilien“).
- „-“: Nichts ermittelt.
- „O“: Nicht recherchiert, da allgemein bekannter Stand der Technik.

P 2253.1.
6.71

PCT/FCO/SS/III/12
Annex I
page 26

[Annex 9 follows]

Indication of Bibliographical Data
of the Publications searched

1. Patent Literature

- a) Patent literature searched and available in the original are cited according to the ICIREPAT country code indicating type and number of the publication. e.g. German examined application Nr.12 34 567 = DT-AS 12 34 567, the sequence of the countries corresponding to the classified search file. If other countries are concerned, they are listed in the order of the German alphabet.

The publications searched and the types of publications are to be cited within the countries in the following order and with rising numbers (without "Nr." and classes, also in respect to German patent literature):

Patentschrift Patent	= PS
Zusatz-Patentschrift (Patent of addition)	= Zusatz-PS
Auslegeschrift (examined application)	= AS
Patentanmeldung (Patent application) (with the number and publication date, e.g. DT-Anm L 30 126 VII/8b bek.gem.13.08.54))	= Anm
Offenlegungsschrift (unexamined application)	= OS
Gebrauchsmuster (Utility certificate)	= Gbm

- b) Reports on patent literature taken from abstracts journals such as "Chemisches Zentralblatt", "Derwent Japanese Patents Report" etc. are to be cited as follows:

ICIREPAT country code followed by the word "Zeitschrift", full title of the abstracts journal; volume (abbreviated Bd.); (in round brackets): year of issue, serial number (abbreviated H.).

In case of Derwent Reports the chapter from which the report is taken shall additionally be cited in round brackets.

Number of page (S) or column (Sp), respectively, or report number (Referat ...), for reports from "Chemisches Zentralblatt" as of 1964 and from Chemical Abstracts as of 1967.

On form-sheet P 2252.0 (Annex 3) as well as on form-sheet P 2253.0 (Annex 4) the country code and the number of the respective patent specification in round brackets. In cases of a later published report where the issue date of the original is still coming within the priority period, the date of publication is also indicated in the brackets; e.g.

Dt-Zeitschrift Chemisches Zentralblatt
Bd.134 (1963) S.360 (IT-PS 517 316)

DT-Zeitschrift Chemisches Zentralblatt
Bd.135 (1964) H.5 Referat 2341
(JA-AS 859 (1961))

GB-Zeitschrift Derwent Japanese Patents Report
Bd.4 (1965) H.3 (1) S.1 (JA-AS 818 (1965))

DT-Zeitschrift Chemisches Zentralblatt
Bd.140 (1969) H.15 Referat 1971
(OS-PS 121 629 veröff.15.01.67).

2. Non-Patent-Literature

a) The following indications are required for books:

Country code and the word "Buch", abbreviated first name and full name of the author, title and publishers, edition, if any, place and year of issue (in brackets) part or volume and page,

e.g.

on form-sheet P 2252.0 (Annex 3)

DT-Buch T.Tödt, Korrosion und Korrosionsschutz
Walter de Gruyter & Co, 2.Auflage
Berlin (1961) S.293-296

on form-sheet P 2253.0 (Annex 4)

additional references may be given as for example

a) in particular catch-word:

DT-Buch T.Tödt, Korrosion und Korrosionsschutz
Walter de Gruyter & Co, 2.Auflage
Berlin (1961) S.293-296
Sauerstoff-Oxidschicht S.295

b) Periodicals are in principle cited in the same manner as abstracts journals (see 1.b),

e.g.

on form-sheet P 2252.0 (Annex 3)

DT-Zeitschrift Ziegelindustrie Bd.11 (1958)
S.275-279

on form sheet P 2253.0 (Annex 4)

additional references may be given as for example
the title of the report concerned, a catch-word etc.:

DT-Zeitschrift Ziegelindustrie Bd.11 (1958)
S.275-279
"Möglichkeiten der Erweiterung des Anwendungsbe-
reiches von Ziegeldecken"
Fig.17 S.277 Z.8-12

c) Non-patent-literature taken from abstracts journals cited as follows:

on form-sheet P 2252.0 (Annex 3)

DT-Zeitschrift Chemisches Zentralblatt Bd.139
(1968) H.8 Referat 1034

on form-sheet P 2253.0 (Annex 4)

DT-Zeitschrift Chemisches Zentralblatt Bd.139
(1968) H.8 Referat 1034 (J.med.Chem.10 (1967) 2, 154-158)

Flash-reports from Chemisches Zentralblatt are cited in the same manner as the other reports from Chemisches Zentralblatt without any additional remark as already the serial number indicates whether a report or a flash-report is concerned,

e.g.

on form-sheet P 2252.0 (Annex 3)

DT-Zeitschrift Chemisches Zentralblatt
Bd.140 (1969) H.53 Referat 0001

on form-sheet P 2253.0 (Annex 4)

DT-Zeitschrift Chemisches Zentralblatt
Bd.140 (1969) H.53 Referat 0001
(J.Organometallic Chem.(Lausanne) 13 (1968) 2,
505-11)

Reports from the Chemical Abstracts until 1966, in-
clusive, shall be cited as follows:

on form-sheet P 2252.0 (Annex 3)

US-Zeitschrift Chemical Abstracts
Bd.65 (1966) Sp.1610e

on form-sheet P 2253.0 (Annex 4)

US-Zeitschrift Chemical Abstracts
Bd.65 (1966) Sp.1610e
(Am.Mineralogist 51 (1-2), 216-20 (1966)(Eng.))

as from 1967:

on form-sheet P 2252.0 (Annex 3)

US-Zeitschrift Chemical Abstracts
Bd.66 (1967) Referat 1069w

on form-sheet P 2253.0 (Annex 4)

US-Zeitschrift Chemical Abstracts
Bd.66 (1967) Referat 1069w
(J.Clin.Invest.45(11), 1719-31 (1966)(Eng.)).

In cases of a later published report where the original is prior published or published within the priority period, the source of the original which contains the date of publication, shall be cited not only on form-sheet P 2253.0 (Annex 4) but also on form-sheet P 2252.0 (Annex 3).

In these special cases it shall be cited as follows:

on form-sheet P 2252.0 (Annex 3)

US-Zeitschrift Chemical Abstracts Bd.70
(1969) Referat 10034y (Biol.Med.(Paris) 1968,
57(3), 297-301 (Fr))

also on form-sheet P 2253.0 (Annex 4)

US-Zeitschrift Chemical Abstracts Bd.70
(1969) Referat 10034y (Biol.Med.(Paris) 1968,
57(3), 247-301 (Fr)).

In cases of doubt the publication is cited in the interest of the search applicant even though the mere indication of the publication year does not sufficiently identify the date of publication. Said indications shall be as concise as possible. Any additions and abbreviations not appearing in the title of the review shall be avoided.

[Annex 10 follows]

REGULATIONS UNDER THE PATENT COOPERATION TREATY

Rule 8

The Abstract

8.1. Contents and Form of the Abstract

a) The abstract shall consist of the following:

- 1) a summary of the disclosure as contained in the description, the claims, and any drawings; the summary shall indicate the technical field to which the invention pertains and shall be drafted in a way which allows the clear understanding of the technical problem, the gist of the solution of that problem through the invention, and the principal use or uses of the invention;
 - ii) where applicable, the chemical formula which, among all the formulae contained in the international application, best characterizes the invention.
- b) The abstract shall be as concise as the disclosure permits (preferably 50 to 150 words if it is in English or when translated into English).
- c) The abstract shall not contain statements on the alleged merits or value of the claimed invention or on its speculative application.
- d) Each main technical feature mentioned in the abstract and illustrated by a drawing in the international application shall be followed by a reference sign, placed between parentheses.

8.2. Failure to Suggest a Figure to be Published with the Abstract

If the applicant fails to make the indication referred to in Rule 3.3 (a)(iii), or if the International Searching Authority finds that a figure or figures other than that figure or those figures suggested by the applicant would among all the figures of all the drawings, better characterize the invention, it shall indicate the figure or figures which it so considers. Publications by the International Bureau shall then use the figure or figures so indicated by the International Searching Authority. Otherwise, the figure or figures suggested by the applicant shall be used in the said publications.

8.3. Guiding Principles in Drafting

The abstract shall be so drafted that it can efficiently serve as a scanning tool for purposes of searching in the particular art, especially by assisting the scientist, engineer or researcher in formulating an opinion on whether there is a need for consulting the international application itself.

Rule 38

Missing Abstract

38.1. Lack of Abstract

If the international application does not contain an abstract and the receiving Office has notified the International Searching Authority that it has invited the applicant to correct such defect, the International Searching

Authority shall proceed with the international search unless and until it receives notification that the said application is considered withdrawn.

38.2. Establishment of Abstract

a) If the international application does not contain an abstract and the International Searching Authority has not received a notification from the receiving Office to the effect that the applicant has been invited to furnish an abstract, or if the said Authority finds that the abstract does not comply with Rule 8, it shall itself establish an abstract (in the language in which the international application is published). In the latter case, it shall invite the applicant to comment on the abstract established by it within 1 month from the date of the invitation.

b) The definitive contents of the abstract shall be determined by the International Searching Authority.

Rule 44

**Transmittal of the International
Search Report, Etc.**

44.1. ---

44.2. Title or Abstract

a) Subject to paragraph (b) and (c), the international search report shall either state that the International Searching Authority approves the title and the abstract as submitted by the applicant or be accompanied by the text of the title and/or abstract as established by the International Searching Authority under Rule 37 and 38.

b) If, at the time the international search is completed, the time limit allowed for the applicant to comment on any suggestion of the International Searching Authority in respect of the abstract has not expired, the international search report shall indicate that it is incomplete as far as the abstract is concerned.

c) As soon as the time limit referred to in paragraph (b) has expired, the International Searching Authority shall notify the abstract approved or established by it to the International Bureau and to the applicant.

44.3. ---

End of Annex and of document

WIPO



WORLD INTELLECTUAL PROPERTY ORGANIZATION
UNITED INTERNATIONAL BUREAUX FOR THE PROTECTION OF INTELLECTUAL PROPERTY

GENEVA

BIRPI

PARIS UNION COMMITTEE FOR INTERNATIONAL COOPERATION
IN INFORMATION RETRIEVAL AMONG PATENT OFFICES
(ICIREPAT)

TECHNICAL COMMITTEE I

RETRIEVAL SYSTEMS, DESIGN AND TESTING

Fourth Session, Geneva, October 12 to 14, 1970

QUESTIONNAIRES ON SEARCH STANDARDS
SUMMARY OF REPLIES

Report by the SecretariatIntroduction

1. In BIRPI Circular No. 840, dated May 20, 1969, Offices were requested to provide information about the search standards which are required of or obtained from their information retrieval systems (STAC I No. 98).
2. At the request of the Chairman of TC.I, BIRPI prepared a summary of the replies (document IC/TC.I/10(69)), which was discussed at the second session of TC.I.
3. It appeared that not all Offices had answered all the questions contained in the request. In order to procure a complete set of answers from all Offices, a list was prepared stating more explicitly the questions contained in STAC I No. 98. This list was communicated to all Offices, asking them to review their answers in the light of this list, and to supplement them whenever necessary. Four new questions were added to the list by the second session of TC.I (BIRPI Circular No. 971).

4. The replies received to the content of BIRPI Circular No. 971 were communicated to all TC.I members for consideration at the third TC.I session (documents IC/TC.I/5(70) and its two Supplements).

5. At its third session, TC.I took note of the documents containing the replies to BIRPI Circular No. 971, but felt that in order to proceed more effectively a summary was needed giving an overall picture of the replies to Circulars No.s 840 and 971. The Secretariat was asked to prepare this summary for consideration at the fourth session of TC.I.

6. Attached to the present document are the following Annexes:

Annex A : A list stating explicitly the questions contained in STAC I No. 98 and the four additional questions formulated by TC.I (formerly Annex I to Circular No. 971).

Annex B : The summary of replies as prepared by the Secretariat, following the same sequence as the questions presented in Annex A.

7. Replies received were from Czechoslovakia (CS), Denmark (DK), Finland (SF), Germany (Federal Republic) (DT), Hungary (HU), Ireland (EI), Japan (JA), the Netherlands (NL), Norway (NO), the Soviet Union (SU), Sweden (SW), the United Kingdom (GB), the United States (US) and the International Patent Institute (IB), and have been communicated as documents IC/TC.I/7(69) and its two Supplements and documents IC/TC.I/5(70) and its two Supplements.

[End of document IC/TC.I/20(70)]

[Annexes A and B follow]

Search Standards

Original questions put to Heads of Offices (Circular No. 840):

1. Completeness of search files
 - (a) types of document (patents - non-patents)
 - (b) nationality of documents
 - (c) age of documents
2. Thoroughness of search
 - (a) discontinuation of search
 - (b) search for equivalent subject matter
 - (c) search through analogous art
 - (d) state-of-art searches
 - (e) specific-matter searches
 - (f) time-limits on examiners
3. Completeness of text
 - (a) claims as substitute for full text documents
 - (b) abstracts or abridgements as substitute for full text documents
 - (c) claims as a screen leading to full text documents
 - (d) abstracts or abridgements as a screen leading to full text documents
4. Distribution of efforts
 - (a) improvement of existing conventional systems
 - (b) development of non-conventional systems
 - (c) input side (classification and indexing)
 - (d) output side (searching)
 - (e) optimum file size of conventional systems
 - (f) optimum file size of non-conventional systems

Additional questions (Circular No. 971):

1. Search time per application
2. Number of citations per application
3. Classification of foreign patent documents
4. Removal of corresponding patent documents

List prepared by Miss I-L. Schmidt
Chairman, TC.I

/End of Annex A; Annex B follows/

Question 1 : Completeness of Search Files

- (a) Types of Documents (Patents, Non-Patents)
- (b) Nationality
- (c) Age of Documents

Patent Documents (a) to (c)

6. The data provided are summarized in Table I (see page 32).

7. The data as given in Table I should be supplemented as follows:

- (1) CS: "At the time being the search files are being rearranged according to IPC, so that the Czechoslovak Patent Office might be able to come back to this matter as soon as exact figures are at hand. At present only figures concerning library files can be given."
 - (2) SU: "The documents of 53 countries are represented in the national collection, namely: the U.S.S.R., the U.S.A., FRG, GDR, Czechoslovakia, France, Great Britain, Switzerland, Sweden, Italy, Netherlands, Hungary, Poland, Japan, etc. The age of documents varies according to the nationality of documents. For example:

the U.S.S.R.	-	published since	1924
the U.S.A.	-	"	" 1935
FRG	-	"	" 1950
Japan	-	"	" 1950
France	-	"	" 1956
Great Britain	-	"	" 1916, etc."
 - (3) US: "Search file contains patents from the following countries (as available), Australia, Austria, Belgium, Canada, Czechoslovakia, Denmark, East Germany, Egypt, Finland, France, German Federal Republic, Great Britain, India, Ireland, Italy, Japan, Korea, Netherlands, Norway, Pakistan, Philippine Republic, Poland, Rumania, Sweden, Switzerland, U.S.S.R.;
- Age - The U.S. has no cut off date for patent documents."
- "It is estimated that about 67.5% of the world patents are in the U.S. search files or are available for filing, this includes cross-referenced patents. The deficiency results in

Question 1 : Completeness of Search Files

- (a) Types of Documents (Patents, Non-Patents)
(b) Nationality
(c) Age of Documents

Patent Documents (a) to (c)

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(2) SU: "The documents of 53 countries are represented in the national collection, namely: the U.S.S.R., the U.S.A., FRG, GDR, Czechoslovakia, France, Great Britain, Switzerland, Sweden, Italy, Netherlands, Hungary, Poland, Japan, etc. The age of documents varies according to the nationality of documents. For example:

the U.S.S.R.	-	published since	1924
the U.S.A.	-	"	1935
FRG	-	"	1950
Japan	-	"	1950
France	-	"	1956
Great Britain	-	"	1916, etc."

(3) US: "Search file contains patents from the following countries (as available), Australia, Austria, Belgium, Canada, Czechoslovakia, Denmark, East Germany, Egypt, Finland, France, German Federal Republic, Great Britain, India, Ireland, Italy, Japan, Korea, Netherlands, Norway, Pakistan, Philippine Republic, Poland, Rumania, Sweden, Switzerland, U.S.S.R.;

Age - The U.S. has no cut off date for patent documents."

"It is estimated that about 67.5% of the world patents are in the U.S. search files or are available for filing, this includes cross-referenced patents. The deficiency results in

considerable measure from non-receipt of early issues of foreign patents. The percentage quoted is based on records of inputs and certain estimates, it is not the result of an actual inventory of the files."

(4) GB: "The UK Office document collection for search purposes is effectively all UK patent specifications published in the preceding 50 years."

Non-Patent Literature

8. The statements were as follows:

(1) CS: "Non-patent literature is not included into the search files but some examiners, especially in chemical field, use a well organized collection based prevalingly on Chemical Abstracts and Chemisches Zentralblatt."

(2) HU: "... with the exception of Chemical Abstracts being regularly used in course of chemical searches."

(3) DK/SW: "The novelty search shall in addition be made on the basis of other available literature when deemed necessary."

"... as far as non-patent literature is concerned only "Chemical Abstracts" is considered obligatory, while other available non-patent literature may be searched at the discretion of the examiners."

(4) NO: "The novelty searching shall also include other accessible literature when this is found necessary."

(5) SW: "The examiners in the chemical field also use Chemical Abstracts. Then every examiner can choose too to subscribe a number of technical journals or reviews within his field."

(6) NL/IB: "The search file contains moreover about 400,000 non-patent documents, mostly articles from periodicals (growth at a rate of 40,000 annually)."

"About 2% of the searches are made by means of Chemical Abstracts only."

(7) DT: "Abstracts or abridgements are mainly used in the field of chemistry. The main contents of 22 abstract journals are transferred on cards and integrated into the examiners' search files."

- (8) JA: "As to non-patents, our Office subscribes to 544 foreign and 203 Japanese periodicals, the copies of which are offered for search. For pertinent articles in 150 foreign and 153 Japanese periodicals out of the above, we have been assigning, since 1964, patent class, and xerographic copies of such articles are distributed to the examiners concerned. We also have publications and technical documents not regularly issued, which are offered for reading by those who are interested."
- (9) SU: "The national collection of documents includes not only patent documents but also non-patent literature. They are : patent specifications and abstract journals of different Offices, scientific literature and technical periodicals."
- (10) US: "The examiner's search file normally comprises such non-patent literature as may have been placed in the files by the examiners, abstracts (primarily chemical), and publications, including text books found in the scientific library."
- (11) GB: "Very occasionally other material, e.g. Chemical Abstracts, may be searched by an Examiner."

Observations by the Secretariat

9. It was stated by Germany (Federal Republic) that the German Patent Office endeavours to incorporate into the search files the entire printed matter of the Soviet Union and of Japan in a suitable form (e.g., as abstracts in English). The date when this project was started, or the first patent numbers onwards, have not been given.

10. As far as the data collected in Table I are concerned, it would seem that more explicit figures should be provided--as they were by all other countries--by DT, SU and US, in order to complete the picture.

11. As far as non-patent documents are concerned, it appeared that the main area of technology in which non-patent literature is consulted is predominantly chemistry. Chemical Abstracts seems to have an outstanding record in this respect.

Question 2 : Thoroughness of Search

12. The legal requirements as laid down in the Patent Acts were described in detail.

- (1) DK: IC/TC.I/7(69), Annex B, page 1.
(2) NO: IC/TC.I/7(69), Annex G, page 2.
(3) DT: IC/TC.I/7(69), Annex C, pages 2 and 3, and IC/TC.I/5(70), Annex F, page 2.
(4) JA: IC/TC.I/7(69) First Supplement, Annex K, page 2.
(5) US: IC/TC.I/7(69) Second Supplement, Annex N, pages 2 and 3 and Appendix I.
(6) GB: IC/TC.I/7(69), Annex I, pages 2 to 4.
(7) EI: IC/TC.I/7(69), Annex E, and IC/TC.I/5(70), Annex D, page 2.

13. It was stated by SW and SF that the Nordic countries have the same patent law and the same patent practice. Accordingly, it was said that the search standards required of and obtained by DK were the same in SW and SF (IC/TC.I/7(69), Annexes H and J).

Discontinuation of Search (a)

14. It was assumed that the search is discontinued when it is unlikely that any reference or any better reference is to be found. This was also expressly stated by HU, DK, SF, NO, SW, NL, SU and GB.

Type of Search (b) to (e)

15. The type of searches performed were specified as follows:

- (1) CS: "Search of equivalent matter and/or through analogous art is accomplished whenever the examiner finds it necessary;
State-of-art searches are not made in CS Office;
Specific-matter searches are made in dependence of individual applications."
- (2) HU: "The search for equivalent subject matter of analogous art is effected if it can be concluded on the basis of cross references or other facts."

"In course of search of citable documents generally references to the state of art are found. Consequently, separate search relating to the state of art has not to be effected.

The search is extended to the subject of the claims, in this sense the search is a specific matter search. The search does not concern other subjects figuring eventually in the application."

- (3) DK: "The novelty search should always comprise equivalent subject-matter and analogous art."

"Normally, the novelty searches are specific matter searches, i.e. the searches concern the inventions described in the applications. State-of-the-art searches are made only occasionally for the purpose of providing a background for the processing of the applications."

- (4) NO: "Equivalent subject matter or analogous art is searched when the examiners find a sound reason for doing this.

As a rule both state-of-art searches and specific matter searches are made."

- (5) NL: "Our patent law does not restrict the exclusive right to what has been claimed but protects the invention as understood from the claims in the light of the description. Therefore a search is made for the invention including equivalent subject matter and analogous art."

"In case no anticipations have been found, references for the state of art are required. Normally, during the search in groups, these will be found during the search and their absence is no reason to extend the search."

- (6) IB: "If by "equivalent subject matter or analogous art" is meant widening the scope of the search, we can say that novelty searches with respect to a specifically claimed subject matter are always conducted on a broad base of equivalent or analogous art."

"State of the art and specific matter searches. Generally, our searches are specific matter searches, but if no relevant documents are found, a state of the art search is obligatory."

- (7) DT: "The new German Patent Law clearly distinguishes between isolated (novelty) search and search in connection with examination of an application, both being carried out upon special request. If a request for isolated (novelty) search has been filed, all relevant patent and non-patent documents contained in the search file will be searched. The search extends to all claims, no distinction being made between independent claims, interdependent and dependent claims.

If a request for examination has been filed the examiner may discontinue the search when he has found material covering the main subject matter claimed and when it seems to be unlikely that any better reference will be found."

"In case of search in connection with a request for examination, searching in neighbouring fields might be useful."

"In case of isolated search searching in adjacent fields for incidental subject matter is done - if necessary - for round off state-of-art searches."

- (8) JA: "In searching for novelty, we search, as a rule, what is mentioned in the "scope of claim" of an application. Searching for equivalent matter and analogous art is done at the same time. Searching for analogous art is used as a basis of decision for inventive step."

"... we assume state-of-art search means searches for art publicly known or used including publications and periodicals, etc. ... As to publicly known or used art, examiners try to collect as much data as possible."

"The meaning of "specific matter" is not clear to us. As already stated, search for novelty is done on the scope of claims of an application. As a rule, also, search is conducted at the same time on the specific technology contained in what is mentioned in the specification as a working example of such claim or claims. Search may be extended to the possible new technology which may come up should the specification be amended by the notice of rejection."

- (9) SU: "The search conducted is aimed to reveal known art as the cause for rejecting the grant of inventor's certificate (patent) or in positive case as closely related prior art. In this respect the subject-matter of previous documents and analogous art sources may be used according to the legislation and practise.

The state-of-art search and specific-matter searches are conducted for the purpose of prognosing the development of art and for fulfilling the requests of industries which undertake different development projects.

We do not conduct searches for equivalent subject-matter only."

- (10) US: From lecture material on search and retrieval practice presented to examiners attending the USPO Academy, it is clear that the purposes of search by the Patent Office are "novelty, analogous utility, for restriction purpose, interference search and assignment of applications" (document IC/TC.I/7(69) Second Supplement, Annex N, Appendix III, page 1).

- (11) GB: "The official office search is restricted to pure novelty. Equivalent matter is therefore not deliberately looked for but may be noted in the course of the novelty search. There is, of course, nothing in the GB documentation or classification systems to prevent search for equivalent matter.

The office does not make state of art searches."

"... there is no reason why, as a matter of office policy, applicants should not be informed of the identity of documents within the Examiner's knowledge (as the result of an official search or otherwise) which, although having no statutory force under Section 7 of the Act, are relevant to broader patentability issues."

- (12) EI: "The scope of the search is determined by the scope of the claims and the search is made in the corresponding units of search material subdivided according to the International Classification of Patents."

16. The International Patent Institute gave a survey of the special services it offers to industry and individuals, such as infringement searches, searches for corresponding patents, novelty searches relating to patents granted, etc. (document IC/TC.I/7(69) First Supplement, Annex M, page 2, i.c.).

Time-Limits on Examiners (f)

17. As far as time-limits imposed on examiners are concerned, the following statements have been made:

- (1) CS: "The only time limit is the year plan."
- (2) HU: "The examiners have no time limit but the office expects a certain number of examinations."
- (3) DK: "No time-limits are imposed on the examiners as regards the novelty search, but they are expected to dispose of a certain number of applications a year, a number which depends on the technical nature of the applications."
- (4) NO: "A direct time-limit is not imposed on the examiners."
- (5) NL: "Although at present considerable improvement of the examiners production rate is sought for, the search requirements described are still essentially maintained. Stress is laid on the avoidance of loss of time for search which is not required, on avoiding search in groups in which anticipations might, but - according to group wordings - should not be found, on avoiding search for non-essential specific matter, on discontinuing search once a nearly complete anticipation has been found, and on not too easily supplementing the search in a later stage."
- (6) IB: "We normally have no time limit for the searches, but it is left to the judgment of the experienced examiners or head of the group to determine whether stopping the search is justified."
- (7) DT: "A further limitation of the search (such as limitation of the prescribed search time ...) is not permissible even in times of great stress of work."
- (8) JA: "There is no specific time limit for searching imposed on the examiners. But an annual target number of examinations is fixed for each examiner on the basis of the technical field and the experience of the examiner. Thus it may be said that search time is actually limited."
- (9) SU: "Usually there are no time-limits imposed on examiners. However, the qualifications and experience of the personnel, the seniority and the subject-matter field determine to some extent the time spent."

- (10) GB: "There are no time limits on Examiners."
(11) EI: "Examiners are not subject to a time-limit, but a record of output is kept."

Observations by the Secretariat

18. It seems obvious that some Offices at least had difficulty in understanding the meaning of the various options of Question 2. "Specific-matter" searches, more particularly, were interpreted in different ways. However, from most of the cases it emerged that the search performed was a search for prior art in general, rather than equivalent subject matter, analogous art or specific subject matter search, alone.

19. Hungary stated that searches regularly cover the national and German (Federal Republic and Democratic Republic), Austrian and Swiss patent documents, but if required the search could also be extended to English, French and Soviet patent documents, especially on the basis of references found in other sources.

20. The Soviet Union stated the following:

"In the practice of the USSR Institute of patent examination the search for examination is not divided into primary and extended. As a rule searching is started in the national inventor's certificates and patent specifications for main and cross-reference classes and further it continues through patent specifications of other countries which occupy the leading position in respective field (the choice of these countries is made by the examiner for each particular case) and through national and foreign technical non-patent literature, periodicals, journals of abstracts, catalogues etc."

Question 3 : Completeness of Text (a) to (d)

21. The question of claims, abstracts or abridgements of patent documents used as substitute for full-text documents or as screen leading to full-text documents was treated as follows:

- (1) CS: "Neither claims nor abstracts or abridgments are used as substitute for full text documents.
US Official Gazette, GB Abridgments and DT Auszüge are used as screening material."
- (2) HU: "The search is made with the direct study of the full text of patent specifications. The text of claims never replaces the full text documents.
Examiners do not use abridgements for searches. Among the different abstracts only the use of Chemical Abstracts is general in the course of searches of chemical applications.
If the Office search files contain the full text of patent specifications, separate claim-collections are not at disposal. The examiner can use as screen of patent specifications only the claims figuring at the end of patent specifications in case they facilitate searches.
Examiners use exclusively Chemical Abstracts as a screen which leads in certain cases to full text documents. In other cases the study of the full text is unnecessary, the text published in Chemical Abstracts is sufficient."
- (3) DK: "The disclosures through which the searches are made are complete disclosures with one exception: instead of GB specifications GB abridgments are used."
- (4) NO: "The searches are as a rule made through complete disclosures.
GB abridgments are used only for localizing documents which may be of interest."
- (5) NL: "Only about 3% of the documents in our file are abstracts. They concern:
. some older patents (claims and drawings);
. old non-patent documents (an indication of the subject made by the examiner);
. copies of abstracts of non-available non-patent documents."

The first two kinds are not added to our collection any more. Taking into regard the size of the present collection, these kinds of abstracts are hardly of any use. Their use frequently requires a check of the full document and this is too time-consuming.

A few of the third kind are still added to our collection, mostly in the ehcmical field.

We presume that the search utility of abstracts depends both on their quality and on the field the subject covered is concerned with. At any rate we think searches on claims only not justified."

"Within certain fields, especially chemistry, an abstract of high quality is regarded acceptable. But even then the full text documents are preferred, especially if the characteristic or the relevant passages (to the subject of the file concerned) have been marked."

- (6) IB: "Our searches are made on the full text of the patents or articles. If under special circumstances the search is made on the basis of abstracts (e.g. chem. abstracts) an attempt is always made to consult the full text."
- (7) DT: "The examiner has to search the complete printed publications; the search is, in general, not confined to abridgments, abstracts, or only to the claims of the originals of Patent Office publications."
- (8) JA: "We search complete specifications, and not abridgments, as to Japanese patent documents.

In the chemical field, we use Chemical Abstracts, Gazettes, British Abridgments and Derwent Abstracts and abstract cards that our Office made up from U.S. patent specifications. Since the degree of content coverage of these differ, the effective utilization we make of them differs, too. For instance, we cannot conduct much effective search by using Gazettes, which contain claims only and therefore lack sufficient information compared with those documents that contain disclosure of entire specifications.

Chemical Abstracts mainly cover an embodiment of the invention and they do not serve sufficiently for searching of "Selection Invention". Also, we find difficulties in the searches for inventions concerning processes or devices by Chemical Abstract. U.S.P. abstract cards are fairly good but they mainly deal

with "one claim and one embodiment", which means not all the necessary embodiments are covered. Similar situation is prevailing in British Abridgments. Putting this and that together, it is considered that over 95% of new chemical compounds are covered, but when it comes to inventions of processes, devices or of application, much are missed. Experienced examiners estimate the about 30% are missed in the field of inventions of applications.

In the field of mechanical and electrical inventions, we use British Abridgments much, and the percentage of obtaining relevant documents is considered as about 90% for machine elements and transmission devices, and about 60% as the overall average."

- (9) SU: "When searching the examiner uses mostly full text documents (patent specifications). But sometimes we use abstracts and abridgments for a number of countries as a means for screening search results. For instance: Great Britain, the U.S.A., France - since 1966. In the examiner's file we substitute the patent specifications of FRG by claims together with drawings taken from the "Auszüge". In such cases we start searching with the claims study using it here as a screen leading to full text documents afterwards."
- (10) GB: "Claims are not used as a substitute for full text nor as a screen leading to full text documents."
- (11) EI: "Abridgements and index cards with classification and brief description are used as a screen leading to full text documents."

22. Although not explicitly stated, it was clear from the reply of the United States that neither claims, abstracts nor abridgements are used as substitute for full-text documents or as a screen leading to full-text documents.

Observations by the Secretariat

23. Part of the content of the statements as given above are also contained in Table I (see * : documents in abstract or abridged form). See also paragraph 11.

Question 4 : Distribution of Efforts

Improvement of Existing Conventional Systems versus
Development of Non-Conventional Systems (a) and (b)

24. Statements were as follows:

- (1) CS: "It is suggested not to improve existing systems but to invest efforts in developing new non-conventional systems" and "improvements are realized in conformity with introduction of IPC."
- (2) HU: "Since January 1st 1970 the Office uses for Hungarian patents exclusively the IPC system. Therefore the development of existing conventional systems is not going on."

"We would like to mention, that we consider the development of new non-conventional systems more reasonable than the perfection of existing systems."
- (3) DK: "We have not a classification system of our own and are, consequently, not involved in any work concerning the improvement of classification systems. Therefore, a statement of opinion as regards the distribution of efforts between these two activities can only be given in the form of a recommendation to the major offices. Having made this reservation, I can state that the improvement of the existing classification systems should go along with the development of non-conventional retrieval systems, seeing that for certain technical fields subdivision of the existing classes will solve the problems at a much lower cost than will mechanization."
- (4) NO: "Preference should not be given to improving manual classification systems."
- (5) SW: "Our opinion is that you have to develop both the conventional and the non-conventional systems."
- (6) NL: "Effort in respect of new non-conventional systems we think justified only if the documents within a certain field cannot be made retrievable sufficiently by means of a classified file and if the effort required presumably will be compensated within 5-10 years by resulting savings in search time. Practically the latter condition will not be fulfilled unless the system is realized by ICIREPAT

cooperation. For these reasons the time available for improvement is mostly used for improvement of the classified file. Apart from conversion according to the International Patent Classification, we prefer improvement of frequently used restricted parts of our collection which require too time-consuming searches."

- (7) IB: "Since the NL office and the I.I.B. use the same document collection we refer with regard to this subject to the NL reply."
- (8) DT: "... the German Patent Office is improving the existing systems (e.g. by a more detailed sub-division of the classification [Int. Cl./]) and at the same time developing completely new systems, both being achieved in cooperation with other Patent Offices and in cooperation with the German industry."
- (9) JA: "... at present, 7 engineering officials are specifically in charge of study and development of patent classification systems."

"We are considering developing or introducing non-conventional systems (mechanized retrieval systems) for technical fields where searching by documents maintained by existing patent classification or conventionally systematized segregation is difficult due to the large number of applications or of stored literature."
- (10) SU: "At present the work on substituting full specifications by search cards and abstracts as means for primary search is carried out."
- (11) US: "U.S. effort in manual reclassification has been demphasized in favor of the development of more non-conventional systems of search and retrieval."
- (12) EI: "Refinement of existing conventional systems is a continuing process.

Activity is too small to warrant development of non-conventional systems at present."

Observations by the Secretariat

25. The reply from the Netherlands on these questions was very elaborate and stressed some important basic factors to be taken into account whenever a choice is to be made between improving an existing conventional (i.e., hierarchical) system and developing a non-conventional system (e.g., a mechanized system).

Input Side (Classification and Indexing);

Output Side (Searching) (c) and (d)

26. Statements were as follows:

- (1) CS: "More effort is directed to the input side; at the output side the efforts are kept at the possible minimum."
- (2) HU: "In interest of unification we reclassified with retroactive effect as from 1915 all Hungarian patent specifications. It would be advantageous if other offices would also reclassify the earlier patent descriptions published by them and the lists of reclassification would be exchanged among the offices. In this case files could be arranged uniformly according to IPC.

On the output side the Office wants to extend the search basis viz. to extend searches in the future also to the newest US descriptions."

- (3) DK: "As regards efforts directed to the input side we have of course documentation in mind when we classify our patents. So, in addition to the main classification based on the invention in question we may indicate one or more so-called "duplicate classes", i.e. classes where duplicates of the patent document in question will be placed for the purpose of improving the search files. As far as indexing is concerned we have undertaken to index all non-priority claiming Danish patent documents belonging to the mechanized retrieval systems in which we participate.

The above-mentioned measures relating to the input side are taken in the hope of gaining advantages on the output side. We think it is very important to find the right balance between the efforts and the advantages. Thus, as regards classification, care should be taken not to indicate too many duplicate classes so as to congest the search files and, as regards indexing, care should be taken not to spend too many efforts on technical fields with a low application activity."

- (4) NO: "As to the distribution of effort between the input side of the IR system and the output or searching side, the Norwegian Patent Office has always paid attention to both sides by using highly qualified personnel to do the classifying and indexing work as well as to do the retrieval work."

- (5) SW: "The most efforts ought to be on the input side."
- (6) NL: "Any effort on the input side above the one required for search quality should be fully compensated by the resulting decrease in search time."
- (7) IB: "Since the NL office and the I.I.B. use the same document collection we refer with regard to this subject to the NL reply."
- (8) JA: "As to mechanized retrieval systems, we are putting more effort into the input side (indexing and storing of documents) rather than on the output side at present."
- (9) US: "The shift in emphasis has resulted in a corresponding shift which results in a greater manpower commitment to input, at present, in relation to the output."
- (10) GB: "Devising of new classification or indexing systems is done wholly by Examiners. Backlog classifying and indexing for such systems is done mainly by Examiners and partly by a lower grade of Technical Analysts (mainly ICIREPAT systems). Classification and indexing of new accessions is done wholly by Examiners. Apart from machine implemented systems searching is done wholly by Examiners but recruitment is now under way for a small number of Searchers (a lower grade than Examiners) by way of experiment. Final decisions, however, will be made by Examiners from documents identified by the searchers."
- (11) EI: "At present the greater effort is directed towards improvement in classification."

Observations by the Secretariat

27. Answers given to these questions were very much along the same lines as those to the questions treated in paragraphs 22 and 23.

Optimum File Size of Conventional Systems (e)

28. Statements were as follows:

- (1) CS: "The number of documents to be perused by a manual search depends on the scope of the field and ranges from a few hundreds to several thousands of documents ..."

- (2) HU: "In case of conventional search a group of identical numbers and nationality shall not contain more than 100-150 documents. The use of a group containing less than 10-15 documents is not reasonable, because in case of each search always a considerable number of such groups have to be turned over."
- (3) DK: "In a manual search system we find that a group should preferably not contain more than 200 documents of each nationality. It is namely our experience that if it does so, the examiner will try to make his own subdivision of the file. On the other hand too fine a classification system is not desirable either, since it always implies that several groups have to be perused for each application. Thus, groups containing less than 10 documents of each nationality seem to be undesirable."
- (4) NO: "The finest subdivision of a manual search system should, as an optimum, contain 50-300 documents of each nationality."
- (5) SW: "The file size must not be too large and not too small. If the file size is large the search time will be too long, and if the file size is small the profitability will be low."
- (6) NL: "We estimate the ideal size of a group to be, depending on the subject, 100-300 documents."
- (7) DT: "The number of documents to be perused by the examiner also depends on his technical field and on the subject-matter of the invention to which the search relates. This number is estimated at 200 and more when using conventional systems."
- (8) JA: "From the viewpoint of the user, when files are made by countries, it is desired that 50-100 documents would be collected in one file (for the smallest division in the classification system)."
- (9) SU: "The work on finding out the optimal amount of different documents (patent specifications, abstracts) to be included in a search file has started."
- (10) US: "... the optimum file size in each subclass for a manual conventional search file would be about 100 documents."

- (11) GB: "As a rough approximation we consider that on average the present system for searching GB patents passes about 150 (100-200) documents at the first screen ..."
- "Because of the flexibility of the GB coloured clip system it cannot be said that there is any optimum file size. Much depends on Examiners' preferences, e.g. for a physically small file with a higher concentration of documents to be looked at or a physically larger file with a small incidence of documents to be looked at; (the documents needing to be looked at are identified by colour clip schemes within the physical drawer files)."
- (12) EI: "The abridgements are arranged in units of the IPC designed to contain about 100 items. When a unit increases significantly beyond this size, it is subdivided into the next finer division of the IPC."

Observations by the Secretariat

29. It was noted that Germany (Federal Republic) distinguished an optimum number of documents in the technical field of the examiner in contradistinction to the documents to be perused at the occasion of a search. The optimum file size of an examiner's technical field should not exceed a total of 15,000 documents, whereas the number of documents to be perused was estimated to be 200 or more.

30. The Netherlands quoted that a group contains on an average 230 publications but that the groups are very different in size. The distribution of groups and documents was given (see document IC/TC.I/7(69), Annex F, page 3). The average size of a group in which a document is given its first (main) classification, however, is 550 documents.

Optimum File Size of Non-Conventional Systems (f)

31. Statements were as follows:

- (1) NO: "A mechanized system should contain between 4,000 and 40,000 documents."
- (2) DT: "When using mechanized search the file of an examiner could comprise at least 30,000 documents, depending on the technical field concerned and the system used."

- (3) JA: "We are considering having about 20,000 documents for each field of mechanized retrieval system ..."
- (4) US: "Non-conventional systems should have an optimum size of 10,000 documents. This would assure complete indexing of a system in one year in order that the system be timely and of contemporary interest."
- (5) GB: "There are two aspects to be considered here. One relates to the subject-matter field and one to file organisation for machine manipulation. As regards subject-matter, there is no optimum file size. Provided the field is homogeneous and therefore suitable to be covered by a single term list (of about 1000 terms) there is no limit to the number of documents that the system may contain. The number, for example, may range from a few thousand to many tens of thousands.
- Optimum file size for machine manipulation depends upon the kind of machine and the storage facilities available. It is smallest for single column sorters, larger for sophisticated sorters and larger still for computer tape. Computer file organisation is a subject to which study will need to be given in coming years."

Observations by the Secretariat

32. It was stated by DK and HU that, due to their short experience with mechanized retrieval systems, they could not yet express a view on this matter.
33. Instead of dealing directly with the optimum file size of non-conventional systems, the Netherlands gave some views as to the optimum search requirements for non-conventional systems. Such requirements for non-conventional systems should be that the chance of missing an important anticipation should be less than 20%. Further, at least 10% of the documents retrieved should be citable documents.
34. The reply of JA contained a quotation along these same lines, since they were of the opinion that a mechanized search should reduce the number of documents to be searched manually to 10-30% of the original total present. As an average, 20 documents should be obtained from a mechanized retrieval system.

Additional Question 1 : Search Time per Application

35. Statements were as follows:

- (1) CS: "Very rough estimate is 7-11 hours per application. The given figure is based on practice. No systematic survey is at hand."
- (2) HU: "Search time per application is generally 5 hours."
- (3) DK: "The time required for searching a patent application which includes:
- (i) the determination of the classes, subclasses, groups, and subgroups to be searched,
 - (ii) the search as such,
 - (iii) the final sorting of the selected documents, and
 - (iv) any supplementary search made by other examiners, lies within the range of 3 hours to 7 hours."
- (4) SF: "Taking into account only qualified examiners (not new trainees) the total average time per application is 27 hours. Time for studying the application etc. must be estimated as no definite figures exist at present. If time for checking formal matters is deducted also the figure will certainly fall below 20 hours."
- (5) NO: "In average 9 hours. The handling of the whole procedure of an application is in the hands of the same examiner."
- (6) SW: "From the very detailed time study performed in SW (see document IC/TC.II/7(69), Annex I), one can conclude that an overall average of 7.5 hours net working time per case is needed, whilst 11.9 hours is accounted for as the gross working time per case."
- (7) NL: "Average search time for the first search report of an application (Electrical division): 10 2/3 hours," and "the complete search for an application is entrusted to one single examiner."
- (8) DT: "Search time per application: about 8 hours."
- (9) JA: "It varies depending on the amount of experience of each examiner and also on the technical field of the application. We do not have, at present, accurate statistics on the average time consumed for searching. But we can infer that 1 1/2-3 hours are consumed for searching per application."

- (10) SU: "The search time for an application depends greatly on the nature of application, the subject-matter field and state of search file, therefore the time spent may vary to a considerable extent (2-15 hours)."
- (11) US: "5.6 hours per application of direct search time.
7.14 hours per application of Examiners paid time chargeable to search."
- (12) GB: "In the last 2 months of 1965 search times were recorded for all searches, 12828 in all. Over the whole office the mean search time was about 1½ hours, this representing the time spent at the search files and in deciding and recording which documents should be cited. In the various Sections (A to H) of the Classification Key the mean times varied from 1 to 2 hours but the figures for mean times obscure significant variations within even a single file."
- (13) EI: "One hour on chemical cases; one to four hours, exceptionally six hours, on other cases."

Observations by the Secretariat

36. The reply of the Netherlands was supplemented with data concerning the percentage of searches (40% overall, 25% Electrical division) for which an additional search is to be made in the later stage of granting. Time for this extra search was given to be 1½ hours on average (Electrical division).

37. GB explained the question of supplementary searching. Such a search is to be performed when the subject-matter of a claim extends over other Headings than that to which the application has been assigned. The (supplementary) searches are then made by examiners assigned to these Headings and not by the primary examiner, e.g., in 1964 12.7% of the applications were given a supplementary search.

38. Disregarding GB and EI, which have files containing mainly only the GB and EI patent documents respectively, search times per application vary from 7-10 hours (search times in JA being exceptionally low and in SF exceptionally high).

Additional Question 2 : Number of Citations per Application

39. Survey: see Table II.

TABLE II

Country	Average number of documents cited				Total number of applications in sample	Remarks
	General	Chemical	Electr.	Mechan.		
CS	3-4	2	1	4	2 years CS applications	Respectively 20%, 0%, 35% non-patent literature cited.
HU		2.5	3	3		
DK	1.8 2.2 1.9	1.2 1.0 1.2	2.8 2.4 2.6	2.0 2.6 2.3	420 213 633	Accepted applications. Non-accepted applications. Total.
SF	1.3*	1.2*	1.0*	2.0*	300	
NO		2.4	1.6	2.6	621	
SW		2.0	1.5	2.0	600	
NL	6.1	5.3	6.2	6.4	102	Patents and non-patent literature cited.
DT	2.8					Isolated novelty search: 15 citations.
JA	1.86 1.60 1.73	2.00 1.88 1.94	2.07 1.45 1.76	1.86 1.60 1.73	300 300 600	Applications published. Applications rejected. Total.
SU	1					
US	4.82	4.46	4.76	5.23	902	
GB	1.13*	0.88*	1.0*	+1.1*	400	
EI	1					

*Figures computed by the Secretariat.

+Field (other): "not Chemical", "not Electrical".

Observations by the Secretariat

40. From all countries which have approximately the same or comparable files, the Netherlands and the United States cited by far the most references.

Additional Question 3 : Classification of Foreign Patent Documents

41. Statements were as follows:

- (1) CS: "IPC is being introduced instead of the former re-classification to the German Patent Classification."
- (2) HU: "Foreign patent specifications are generally classified in search files according to the corresponding foreign classification, with the exception of English and French patent descriptions published from 1957 and Soviet descriptions published from 1962 which are classified according to IPC."
- (3) DK: "The NO, SW, SF, and DT patents are classified according to the German classification system, i.e. they are grouped according to the classification printed thereon. The FR patents and the GB abridgments are classified according to the NL classification system, i.e. they are grouped on the basis of the classification assigned to them by the NL Patent Office and communicated to us in the form of lists. The US patents are classified according to the US classification system, i.e. they are grouped according to the classification printed thereon."
- "We consider the interplay between the three different classification systems as an advantage."
- (4) SF: "All incoming foreign patent documents are either filed in numerical order or classified according to a classification printed on the document. When also the IPC classification is printed on the document that is always used. This refers also to France where the sub-group is always OO and the USA where the domestic classification may have even finer sub-groups than IPC."
- (5) NO: "The German classification system is used as domestic classification. Patents from CH (partly), DK, DT, SF and SW and GB-abridgments from 1930-1940 are classified according to this system."
- Patents from AU, CH (old patents partly), OE and US are classified according to their domestic classification.
- GB-abridgments from 1940-1967 and FR patents from 1940 are classified according to the Dutch cl. system.
- FR patents from 1902-1939 classified acc. to FR-system.

GB-abridgments from 1885-1930 acc. to old GB cl. system.

GB-patents from no. 1.100.000 (1968) and CH patents from 1969 on Int. Cl.

Reclassification of GB-abridgments (from 1940) and FR-patents to Int. Cl. according to lists received from the Dutch Patent Office.

DT and Nordic patents are reclassified to Int. Cl. according to lists exchanged between DT and Nordic offices."

- (6) SW: "The DK, NO, SF, DT patents are classified according to the corresponding foreign classification which in these cases are the same as our own domestic classification.

The US patents are classified according to the corresponding foreign classification.

The GB abridgments and the CH patents are classified according to our own domestic classification, except the last year when they have been classified according to the International Patent Classification.

The FR patents are reclassified according to the domestic classification."

- (7) NL/IB: "The foreign patents in our search file are classified according to domestic classification. For about 15% of the specifications in our search file the domestic classification is the International Classification with a few additional subdivisions and additional references, the latter being required in order to incorporate the parts concerned of the International Classification in the total of our classification."

"During 1968 20% of the new foreign patents have clerically been given the same classification symbols as their corresponding NL applications (based on the same priority document) or corresponding patents from other countries. Presumably this % will grow up to 50% within a few years."

- (8) DT: "The German Classification system, which has 89 classes, is being gradually converted into the International Classification (Int. Cl.) system. This is effected by replacing units of classification of the German Classification system by related subclasses of the Int. Cl. In doing this, we use a subclass symbol, which fits into our German system."

Thus, Int. Cl.-subclasses introduced into the German Classification system have differing symbols for the subclass, but the same symbols for the actual subdivision (e.g. 42m¹ 70² equals G 06 c 7/02).

At present between 30 and 40% of the foreign patent documents contained in the search files have already been classified as indicated above, i.e. according to the International Classification of patents but with differing symbols for the subclass. The rest is classified according to the German Classification system.

We hope to have the German Classification system fully converted (at present about 38%) into the Int. Cl. subdivisions by the end of 1972. Reclassification of retrospective files will take somewhat longer."

- (9) JA: "They are classified in accordance with the classification system of the country of issue, as a rule."
- (10) SU: "Full text foreign patent specifications are classified according to the national classifications of corresponding countries. Simultaneously re-classification to the full I.P.C. scheme is carried out on step-by-step basis."
- (11) US: "Foreign documents are classified according to domestic classification."
- (12) GB: "The only foreign patents now in the Examiners' search files are those in ICIREPAT systems, which are hence indexed in the same manner as GB patents, and those in a small number of experimental manual files. Apart from system 03(A/D convertors) the ICIREPAT systems have been incorporated into the official domestic classification. The experimental manual files are classified by the International Classification."
- (13) EI: "Foreign documents are not included in the search files ..." and "abridgments are arranged in units of the IPC ..."

Observations by the Secretariat

42. Disregarding for a moment the efforts of some Offices to convert their search files to the Int. Cl., one can distinguish four methods of keeping search files:

- (i) No reclassification of the incoming foreign documents, hence use of different classification systems, including a domestic classification system:
HU, DK, SF, NO, JA, SU.
- (ii) Reclassification of all incoming foreign documents, hence use of one single domestic classification:
NL/IB, DT, US.
- (iii) Partial reclassification only of incoming foreign documents, hence use of different classification systems:
SW (US patent classification used for US documents).
- (iv) One classification system for domestic documents:
GB, EI (Int. Cl.).
43. Int. Cl. is used:
- (i) as sole classification in:
EI;
- (ii) as one of the classification systems in:
SF (FR documents),
NO, SW (GB abridgments from 1.100.000 onwards and CH patents),
DT (38% of files),
NL/IB (15% of specifications);
- (iii) as new system when reorganizing the files in:
CS (complete change-over in progress),
NL/IB (when suited),
DT (change-over to be completed in 1972, excluding retrospective files),
SU (complete change-over planned),
NO (in collaboration--list exchanges--with IB/NL and DT for DT, FR and GB patents).

Additional Question 4 : Removal of Corresponding Patent Documents

44. Statements were as follows:

- (1) CS: "Corresponding patent specifications are not removed from the search files."
- (2) HU: "Corresponding patents are not excluded from search files."
- (3) DK: "All foreign patents are integrated into the search files; a removal of patents will not be possible as long as we avail ourselves of three different classification systems."
- (4) SF: "All foreign patents are integrated into the search files."
- (5) NO: "Corresponding patents are not excluded from search files."
- (6) NL/IB: "Of the series of foreign patents incorporated in our search file full copies of all patents are included in the search file. Nowadays we make use of the possibility to recognize the corresponding patents. Those received later are still included in the search file but by means of clerical classification in accordance with the family member received firstly."
- (7) DT: "All foreign patent documents are integrated into the search files. It depends on the examiner whether certain corresponding patents are excluded, generally they are not excluded."
- (8) JA: "Not all foreign patents are integrated in our search files. Nor corresponding patents are removed. As the publication dates of corresponding patents differ by each country, sometimes the examiner puts a note on our patent gazette that a corresponding patent exists."
- (9) SU: "Removal of corresponding patent documents is performed in a centralized way using the number of application, the country and date of priority."
- (10) US: "Foreign patents are integrated into the search file, however, duplicate non-English documents are deleted where possible. However, patents of the PCT minimum documentation countries are all filed regardless of duplication."

(11) GB/EI: Not applicable.

Observations by the Secretariat

45. NL/IB and SU seemed to be the only countries who have implemented means or possibilities to recognize on hand corresponding patent documents and when needed to remove them from the active files.

List of Special Studies Performed by Patent Offices and/or
Reported in the Replies

46. Sweden:

Time study at the Swedish Patent Office, April to June 1968.
(Document IC/TC.II/7(69), Annex I)

47. Netherlands:

- (i) Spread of documents over groups of the classified file.
- (ii) Citing frequency of references according to their publication dates. (1966)
- (iii) Working times of technical officers required for adding new documents to search files and improving the search file. (1968)
- (iv) Quality of indexing. (1958)
- (v) Number of groups searched per NL application. (1963)
- (vi) Some results of an analysis of the work of examiners of the Electrical Division. (1968)
- (vii) Quality for our search of search results from other offices. (1955)
(All studies to be found in document IC/TC.I/7(69), Annex F, pages 3 to 8)

48. International Patent Institute:

- (i) Comparison between searches in different offices; speech by Mr. Stamm, Bijblad Industriele Eigendom, August 15, 1969.
- (ii) Abstracts in patent searching; lecture by Mr. van Waasbergen, Scientific Symposium, Moscow, July 1969.
- (iii) Results of a statistical enquiry into the references cited on I.I.B. novelty search reports; 7th Annual ICIREPAT Meeting, pages 373 to 398.
(Document IC/TC.I/7(69) First Supplement, Annex M, pages 3 and 4)

49. United States:

Joint report on U.S./German search exchange. (1966)
(Document IC/TC.I/7(69) Second Supplement, Annex N, Appendix X)

50. United Kingdom:

- (i) Effectiveness of the classifying, indexing and searching instruments. (1965)
- (ii) Domain of search; Callow and Tarnofsky, 6th Annual ICIREPAT Meeting, pages 284 to 297.
- (iii) An investigation in the field of Taps and Valves of the distribution over the search file of patents cited in searches of novelty; 6th Annual ICIREPAT Meeting, pages 298 to 339.

